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PARADOXICAL PAIN

BY

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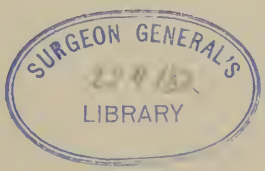
BOSTON
SHERMAN, FRENCH & COMPANY
1916



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TO
THE MEMORY OF
THAT VETERAN DISCIPLE OF SELF-SACRIFICE
WHO GAINED ALL THINGS BY GIVING
EVERYTHING
THIS VOLUME IS AFFECTIONATELY
DEDICATED BY HER
SON

PREFACE

In reviewing the subject of pain, we must recognize that there are two classes: paradoxical pain that sooner or later serves some beneficent purpose and is constructive in its effect while the opposite kind of pain is evil and works for harm and destruction. Differentiation of these two opposing classes will be attempted.

Because of certain fundamental laws of human nature, we should understand that pain is not merely an incident in the beneficent order of things but a profound cause from which the greatest blessings flow.

Paradoxical pain is here used in a general sense for all that is uncomfortable that works for good and may be classed as physical, mental and spiritual, each having an interactive influence.

Truths are never paradoxical, and a paradox is only an expression of ignorance proceeding from a distorted vision. For instance, we would say that vaccination is a paradoxical disease set up to harden vitality and prevent the development of the real disease, the one being protective and the other destructive in its effects. Yet both are classed as disease, but from the standpoint of truth the painful disturbance wrought in the system by vaccination to prevent disease is not really disease — but paradoxical disease. Following this line of argument in the various phases of human activity, we can perceive that effort tends

to power, competition would be a means of attaining superiority, defeat has a share in bringing success, certain forms of anxiety bring tranquillity, and fear, fortitude.

In the spiritual realm, suffering may increase the capacity for enjoyment, unselfishness becomes a legitimate form of selfishness, the pain of striving to do right, a necessary process of education, self-sacrifice, a means of getting more out of life, giving, a process of getting, temptation, a means for greater strength, abasement, a form of self-exaltation, discontent, necessarily the first step of contentment. Grief is not grief when joy comes in the morn, remorse becomes healthful because of betterment of conduct, and old age a mine of peace and wisdom, and death by finally casting off the enemies of spiritual peace becomes a friend to the hope of immortality — the highest aim ever recorded in the history of human aspiration, for to achieve is human but to aspire is divine. We are ever unsatisfied but never dissatisfied.

INTRODUCTION

This would seem to be a day of ephemeral philosophy, nurtured by the whims of a class who elect to disregard the principles of human experience in the search for new thought. The fact of the rapid evolution of the sciences has led many to believe that moral thought would pursue the same course; but a careful study reveals the fact that not a new moral law has been wrought by this scientific era, and the original classics have not been at all affected by the seekers of new thought. In fact, it is surprising that such rapid changes have taken place in the one and not in the other; and we would conclude that the reason for no change of the moral conception would lead us to believe that the classical teachings are sufficiently standardized to meet human requirements, and approach the standard of truth. Men of the present have sought to rehabilitate ideas that Plato long ago discarded; and President Butler of Columbia University has warned us against nostrum venders of new thought. He said, in an address to a graduating class, that some preach new thought without ever having learned to think, and reformers spring up without necessity for reforms that grow out of inexperience. He says further: "The educated man or woman of to-day has literally to struggle against being swept into the cur-

rent of irrationalism." Knowledge has stuffed us, while we have been starved for wisdom; and he further says: "The marvelous last half century of science has made absolutely no impression on the thinking habit. Science has destroyed many prepossessions, and not a few beliefs, but it has not yet taught mankind to think. Our age is far less reflective than was the eighteenth, or the first half of the nineteenth, century; our people are now ever busy hunting for something new." As an evidence of restlessness there are constantly new cults of religion springing up, especially among the scientific class; and some would regard the man a hero who originates a new thought in religion. There has never been a period of history like the present in which religious experience has been so carefully studied; and science and religion have been brought in more harmonious relation, and each has been brought to a sense of humility. This would seem to be an age of pleasure and comfort, and the doctrine of pain, the uncomfortable, is ruled out; and any philosophy with the ear-marks of pain is carefully avoided. Such a tendency arises from faulty vision and will not stand the test of experience.

Philosophy must harmonize its teachings with facts, for otherwise no good will follow. The fact is, the pursuit of pleasure has been proved to be disappointing, and the question arises, will not the advent of a certain amount of pain prove wholesome? Progress is not accomplished by comfort;

and as it is in the nature of man to covet progress, he must learn the laws of pain and labor, if satisfaction is obtained. It would seem unreasonable to believe that a short age of science, afflicted with the unthinking habit, could overturn the records of moral experience of six thousand years; for the moral nature of man has been the most constant factor that history has had to deal with.

Some sort of motive prompts every worthy effort of reasoning human beings, and the direct or reflex effort of this action redounds to that complex psychological state called happiness. It is universally conceded that pleasure and comfort alone do not contribute to the accomplishment of this state, but pain also has a function to perform; but it is not argued that the uncomfortable plays a major part. It is neither all pleasure nor all pain, but a wise mixture according to the constituted laws and peculiar temperaments and varying environments.

Such facts cannot be explained further than by saying we are made that way. Happiness results from conformity to the higher and inner laws of human life, and obviously conveys a complex meaning; and we should attempt to read the order of importance of such laws as follows: Spiritual, intellectual, social and physical.

Happiness will be in defect when the highest law is missed, and that is propounded in the teachings of the Infinite Perfect in Christ. There will be defect if this order is reversed. There are

many shunned sources of happiness that so-called misfortunes lead us to discover.

Sacred and profane history records a perfect life in Christ that can be found nowhere else, and this life was one of pain and sacrifice throughout; and if we would attain the highest we must emulate the best. That being true, we can see how humiliation brings exaltation; joy, sorrow; tribulation, peace; and death, immortality. This is but a discernment into the innermost laws of the spiritual nature of man, and to deny such facts sets aside all the classical teachings. This truth can be apprehended by experience, not by contemplation, for the cross is not a sentimentality.

Of course, there are subordinate attainments that are not without merit; but the degree is estimated in the order of importance. The ignorant Christian for a lifetime would be happier than the educated skeptic. An educated invalid may hope for more than the ignorant athlete, yet the Christian may suffer for the lack of education and health while the educated skeptic and ignorant athlete suffer a greater lack.

It is self evident that obedience to any of these laws is not obtained altogether by pleasant means. Individual conditions and temperaments vary so that ignorance may not be such a great curse nor poverty and ill health a serious misfortune. On the other hand, these adversities may at times serve a wise purpose. Many personal experiences would relate the checking of progress in character

building when the sea of life remained uniformly smooth.

It is perhaps universally conceded that real happiness can not be found outside the sphere of conscience, which applies to every condition and environment of human life.

As each period contributes in a causative way to succeeding stages of life, it must be studied as a whole to render a verdict of happiness. If a happy youth leads to disappointment in manhood, happiness becomes a misnomer; and if a successful career in life is followed by discontent in old age, infractions of the laws of human nature have been wrought. The inherent law of progress in human life demands the last shall be better than the first; and to concede that the so-called happiness in youth is preferable to discontent in old age violates this law, for each stage of life must improve by experience of the preceding stages, and all consecutive stages of life bear a causative relation to each other.[1]

[1] Boethius, the Roman philosopher, said, "To have been happy is the most unhappy kind of misfortune," and my old professor used to teach his class, "Now is the happiest day of your life." According to the laws of human nature we must recognize that a continued state of ease and comfort is not true happiness, for perfect peace must be wrought by a certain amount of so-called unhappiness, and it is ignorance of our making that we always strive for the comfortable. The Stoics said, "It is not things that disquiet us but our opinion about things," which only reads half way the philosophy of happiness, and after all unhappiness is ignorance.

The laws of the moral nature are inexorable and irreversible.

If the attainment of complete satiety were possible, it would blast any life, for it can be noted that every success and attainment of a worldly kind will be immediately followed by a desire to accomplish more; and as long as material environments exist, it is impossible to obtain complete fulfillment in the Infinite Spiritual, but striving for the Perfect accomplishes more peace than that afforded by any worldly undertaking. The desire for satiety is the will-o'-the-wisp that leads seekers through the marshes of vain ambitions seemingly so near yet always afar. Complete satiety has been wisely set in eternity. The spiritual life satisfies a longing that can never be completely filled. So there arises a wise form of discontent as well as the unwise, and it behooves us to differentiate the two classes.

This spiritual philosophy optimizes the value of temporal successes, which become a means and not an end.

Well doing becomes synonymous with well being, and goodness the essence of happiness.

We wonder why we can not start in life with the equipment of wisdom that we possess by experience in the end. To be so equipped in the beginning would defeat that pleasure of pursuit and striving which we must recognize. The retired successful merchant enjoys his retirement less perhaps than the period of his activity; and retiring

from success is one of those so-called pleasures that many fail to enjoy. Inherited wealth can not give the pleasure that is afforded by that which has been earned.

Paradoxical as it may seem, the preparation for life is only obtained when the time arrives for retirement from the worldly activities, and he who has been fitted to live is best prepared for death.

A paradox is but a cloak for ignorance, and the word will be ruled out of our vocabulary when we can read through glasses of superior wisdom. When suffering brings joy, we will call it pleasure; and when enjoyment brings ennui, we will call it pain, and we will cease to use terms so carelessly.

The affairs of human nature are beset with hopeless inconsistencies unless we attempt to look more deeply. Philosophy and religion have never taught that the ideal life can run in an unbroken experience of happiness, and it is not wholesome to live on sweet food alone. The wise mixture of pleasure and pain, like the mixing of colors of paint, produces tints different from either ingredient. For instance, the mixing of purple and yellow produces a green color.

Pain has ever been the subject of man's philosophy, and still bestows its unexpected, beneficent effects in the affairs of man; and we should endeavor to study the reasons therefor. We have always apprehended the benefits, without discerning the causes, and it is evident that the laws of human nature have not been correctly read. The

stimulating element of pain and struggle is found in all forms of life, and constitutes the basic principle of the law of animal life. At first it would seem cruel; but when studied further, it becomes necessary to serve the best ends of life. In fact, without struggle, of the survival of the fittest, there would be hopeless confusion and ultimate annihilation of species. Animal species must conform to the laws of environment; but it is beyond us to question the wisdom of such basic laws of the universe.

In the race of animal life, species are born to suffer and die. The great bulk of carnivorous creatures must live by the infliction of suffering and death; without the adjustment of such laws, human life would be impossible. It is said that human life would be impossible but for the presence of birds, etc., to destroy insects, which are carriers of disease. Malaria and yellow fever are diseases that have been proved to be conveyed almost entirely by mosquitoes; and typhoid fever is principally scattered by flies; and many other diseases are believed to be disseminated by insect life. Naturalists tell us that the pest of rats would annihilate the human race without certain methods of destruction.

In the higher planes of life, the same observation can be made; and in the psychic life the beneficent law of sacrifice still obtains.

"There is purpose in pain; otherwise, 'twere devilish"; and the presence of pain makes pleasure possible.

Optimism harmonizes man's philosophy with the divine order of things; while pessimism is fruitless rebellion to the existing laws. Whatever man's attitude towards the existing order may be, the infinite of law and progress of the universe will grind the rebellious to dust; and it behooves him to discern more clearly and read more carefully, for God, the wise Ruler, compels obedience. "Though he were a Son, yet learned he obedience by the things which he suffered." Heb. 5:8.

Pain is not necessarily the twin of evil. How can an all loving God sit quietly at the course of nature waging the apparently cruel warfare in upholding the law of the survival of the fittest? We do not wonder at the wisdom of such a law under existing conditions; but we might wonder why such an order was made necessary. That would be as idle as saying that man should have four legs instead of two. God is not cruel so long as a wise purpose is being accomplished, and our wisdom is too limited to argue beyond that point. If pain is not a falsehood, it must be a fact.[1]

Evil is a fact; but no good can arise from it, and its presence implies infraction of law by a free-will agent. Pain may be needful and wholesome;

1 Some one has said that truth, however unpleasant, is better than any falsehood, however agreeable; and the doctrine of cheerfulness is well so long as it conforms to fact, but why say "Peace, peace, when there is no peace"? (Jer. 8:11.) Purblind philosophy will not satisfy a human soul, for facts teach us that pain belongs to a wise order of things.

while evil is always needless and harmful. Disease is a fact; and because of that fact, man must gain endurance to contend with his environment. That being true, it becomes wholesome for him to suffer exposure, in order that he and his posterity may acquire immunity. Such is being accomplished and will be referred to in this discussion.

The infliction of pain cannot tend to evil, if rightly endured; and God's law allows its existence for that purpose. Pain involves the necessity for the development of strength; while consolation would defeat the end. The wise and affectionate mother may inflict pain on her child at a time that will accomplish good; but if consolation were to be offered, the object would be thwarted.

Like every question of fact, the existence of pain cannot be argued; but it may be perverted so as to become harmful. Too much pleasure, such as eating, etc., may become pathological, bringing about disease. Too much social pleasure brings about surfeit, and the real object fails of accomplishment. In our lives, good and evil are mixed; and man is endowed with the responsibility of adjusting his character to existing conditions. Too much comfort may provoke pain, and a certain amount of pain may produce comfort. The presence of evil excites the activity of the good; undesirable traits in character often stimulate the cultivation of the good. The realization of a mistake often is a stepping stone to success. The pangs of poverty oftentimes drive an ambition for

wealth. When Christ was asked why the young man was born blind, he said: "Neither has this man sinned nor his parents; but that the works of God should be made manifest in him." John 9:30. This shows that affliction may not be a means of retribution, but a way of glorification; and the young man's blindness may not have been a misfortune. It has been said that virtue may not become strong when the task is light.

There are opposites in every form of human experience from which we can only apprehend knowledge: pleasure and pain, joy and sorrow, health and disease, weakness and strength, etc.; and in the accomplishment of a wise, happy medium, the two extremes play a part. We would have no knowledge of pleasure but for the existence of pain as the one has a necessary meaning of the existence of the other.

Facts and laws of human nature cannot altogether be generalized by the individual study. Physiological pain is a route to discipline; and such pain was experienced by the heroes and martyrs to the richest blessings we enjoy. This is eminently true in domestic life as well as the world of Christianity. It is not incumbent on us to preach patience, but it is necessary to practice it. While pain may be innocent, evil can never be; suffering may be innocent, but the agent of pain may not be so. Shall we call the affectionate mother cruel because she punishes her child? But not so with the parent who vents anger on the

child. Evil injures the victim, while pain does not. Needless and unprofitable pain becomes harmful. May it not be true that excessive joy is as harmful as excessive sorrow? The physiological state occupies a middle ground; for no standard of health is gained by uninterrupted comfort, or by continual suffering. Extreme sunlight is as undesirable for ordinary use as darkness. To be born with moral perfection, without suffering, foregoes the present laws of human nature; for the fact remains that pain has played a part in such attainment. To remove such laws would require the remaking of the moral universe.

So the truth of rejoicing in tribulation can really be apprehended; and the attainment of golden gains of courage and patience implies the necessity of enduring something that is irksome. Self-mastery is not won by some idle sentiment. Courage and patience follow the course of duty, which leads to the goal of virtue. Powers to endure, like all other functions, grow only by exercise. Religious suffering may become exaggerated and still be natural; and to deprive the world of all suffering would tend to spiritual suicide. Pain is a part of the scaffold work in the upbuilding of character, and we admire the boy who does not wince at pain. Pain begets powers of endurance; endurance, fortitude; and self-mastery wins the idealized martyrdom. Paul portrays the law of attainment in a sequential manner: "Tribulation worketh patience; and patience, experience;

and experience, hope." Romans 5:3-4. Pain breaks down barriers between spirits, and develops sympathy between companions; and in individual sorrow, God is sought in prayer. It remains for divine wisdom to adjust these influences in forming our happiness. Brave and patient endurance lifts us above emotion and reveals the divine light.

It can be readily seen that self-inflicted pain cannot work any good, and self-torture cannot accomplish a religious rite.

One would hardly claim sufficient wisdom to mix properly the ingredient causes of spiritual peace; for the physiological laws of human nature are beyond the sway of our desires. The desire for ease is cowardice, and it is not those who have more pain who are gloomiest.

The goodness that pervades the laws of nature is a foreign goodness to that of moral goodness. It is good for fire to burn that our bodies may be warmed or that food may be cooked, but if ignorantly or carelessly used a house may be destroyed or an innocent child may be suffocated. Nature never stops to shed a tear over such disaster. Rains promote growing crops, but floods, unless provided for, will devastate property. Plagues and pestilence run riot if we fail to read the law of germ life and such havoc compels us to adopt sanitary precautions and contravene the laws of germ life. The place to study nature under such circumstances is not in the filth and sewers but in the laboratory. The bad arises from

misuse or ignorance, and our well being depends on knowledge and adjustment.

Nature is not rational. We weed our gardens by intelligent methods. Nature by the survival of the fittest and the breeding stock lives according to the law of battle. Things are reasonable because they are invariable, and effect always follows cause. There is ruthless waste in nature, but compensation returns from another source. Science steps in and short circuits the laws of nature which would require thousands of years to obtain. A Burbank harnesses the laws of evolution of plant life, and in a few years produces a seedless plum or orange. Nature takes infinite leisure. Nature has no benevolence, and without exception gives measure for measure and has no mercy on weaklings. Weakness and inactivity would seem to be the devil in nature.

While altruism, benevolence, mercy, love, have no place in nature, their analogues are might is right and the fittest must survive, and there is harmony in the methods of accomplishment of the laws of their respective realms. For that reason physical sciences occupy a distinct realm from that of theology, but the same laws of harmony pervade each and we will not try to prove one by the other but will attempt to read a harmonious God in all. The religion of nature is might is right, and the fittest must survive, and that is greatly accomplished by painful means. The end justifies the means as it can not be otherwise accomplished.

Shall we call it cruelty that weaklings should be made to get out of the way for the good of the race? That is no more cruel than for our fond desires to perish for the good that may follow. Personal sacrifices that finally redound to our good, at times exact more heroism than death itself. If this is cruel, we must suffer it for we are not imbued with sufficient wisdom to say that we should not be constructed that way. These laws being so constituted, it behooves man to discern that there is benevolence in such an order provided he reads the meaning of such laws, and optimism will be the result of the highest order of intelligence and pessimism the mistake of ignorance. A pessimist has been defined as one who when confronted with the alternative of two evils, chooses both, because when he denies the reality of pleasures he usually magnifies the burden of hardships and thus he cheats himself of profit from both sources for no life is ever lacking entirely in these two sources of profit. But when we attempt to esteem misfortunes wholesome, strange to say our enjoyment of pleasure is enhanced because of an inherent psychological law, for our relish of pleasure frequently lags and requires to be occasionally whetted by adversity. The best of our lives often proceeds from what we at the time esteem worst for we do not erect mile posts of progress in those stages of life in which more pleasures were distributed.

CONTENTS

PART I

CHAPTER		PAGE
I	Material Universe	1
II	Man	9
III	Respiration	13
IV	Digestion	17
V	Parturition	22
VI	Infancy	25
VII	Fatigue	28
VIII	Disease	32
IX	Phagocytosis	41
X	Pain	45

PART II

I	Intellectual Effort	53
II	Competition	61
III	Defeat	66
IV	Anxiety	72
V	Fear	77
VI	Misfortunes	82

PART III

I	Body, Mind, and Soul	91
II	Absence of Pain	99
III	Pain in Religion	105

CHAPTER		PAGE
IV	The "Rod"	108
V	Altruism	113
VI	Striving	119
VII	Self-sacrifice	123
VIII	Warring for Peace	133
IX	Service	140
X	Temptation	144
XI	Humility	151
XII	Divine Discontent	155
XIII	Grief	159
XIV	Remorse	164
XV	Old Age	169
XVI	Death	180
XVII	Immortality	192
	Index	209

PART I

CHAPTER I

MATERIAL UNIVERSE

Pain is an uneasiness produced by some stimulation of the nerves in the peripheral part of the organism, and can be produced in all forms of animal life. The sense of warmth is at first agreeable; but, if the temperature is raised to a high heat, the sensation becomes painful; yet by a repetition of applications of heat, a high temperature, that at first would be unbearable, is borne without discomfort; by this process animal life becomes adaptable to climatic conditions. The same is true of cold and electricity. While these phenomena are observable in animals having a nerve center, analogous phenomena are observable in all forms of life and matter itself. Cells migrate from sources of irritation. The sexual cellular elements attract only those of their kind; whence foreign species would not impregnate. This process, called chemotaxis, explains the migration of the spermatozoon to a great distance, compared with its size, before its final function is performed. It seems to be a quality of matter for the atoms and electrons to have repellent as well as attractive forces; and certain experiments would

lead one to believe that particles of matter at times possess a form of life; chemical affinity, attraction of gravitation, etc., are some of the forms in question. The ancients believed that all matter was endowed with the spirit of life, and endeavored to attain towards plant and animal life. They believed that fossils of animals and plants were evidences of such abortive attempts. Reproduction, a common trait of animal life, is imitated by the molecule and crystal, which produce their own kind. If we were to suppose that electrons, atoms, and molecules possessed a form of life, we could easily ascribe to them painful, or disturbing, phenomena, that are provoked in undergoing certain chemical changes.

We know the diamond is a crystal resulting from a solution of carbon; but the intensity of heat and pressure necessary to make carbon to dissolve, cannot be imitated, to any great extent, in the laboratory. Under certain conditions in the earth's strata, this process takes place, and when the solution evaporates, a gem is formed. Explosives are chemicals whose elements are insecurely locked together, and when a spark unlocks this force, enormous energy may be displayed. Repellent forces between molecules are brought into play, owing to these mysterious chemical laws, and in the making and remaking of chemical compounds molecular tragedies, so-called, may occur. Nitrogen is one of those elements which has the least affinity for other elements, and enters largely

into the making of explosive compounds. Elements at times very reluctantly enter into chemical compounds; but under the rigid force of nature, and in the laboratories, such unions are compelled. The most beautiful colors and tints are found in those chemicals of the unstable class, and the beauty of fragrance of many delicate flowers lasts but a day. So it can be imagined that in many instances, the most beautiful flowers are formed by nature in coercing certain elements into the formation of such temporary creations of beauty.

Similar phenomena may be observed in animal life, and nature seems to impose a painful tax on all species in the care of their progeny; for ceaseless peril is ever present for destruction. Only one in one hundred thousand spores and germs ever reach adult life. Even animal life is taxed with the burden of scattering seeds of plant life. Darwin relates that plants were grown from seeds that were lodged in a wad of clay that was hanging to the feathers of the leg of a migratory bird. Clover fields will not develop seed unless the bumble bee is present to carry pollen from flower to flower.

Certain plant seeds are furnished with kites that they may be wafted away from the parent to germinate in new soil. The touch-me-not discharges with a force that will make it fall at a distance. Seeds of plant life are given a sufficient food envelope to last through the process of germination. Some seeds have also hooklets, that catch the hair

of animals to be cast abroad. Some seeds are smooth and hard and are embedded in fruit, which is consumed by animals, that they may be deposited in circumstances favorable to growth.

In the world of nature, there are fifty thousand species of plants; five million insects; ten thousand birds; twenty-five hundred animals; thirty-five hundred extinct mammals.

The daisy is the most highly organized plant; among insect life, bees and ants; among birds, the jay; among animals, man.

Nature, so careful of the species and careless of the individual, is ever ready to sacrifice for the interest of progeny. While the individual has been the beneficiary of the sacrifice of thousands of generations, it must pay the debt to its descendants. In the struggle of the survival of the fittest, unfitness becomes a preparation for death, so as to give food to the fit.

The mud wasps pay a great debt of labor and sacrifice to their offspring, which they will never see. The female builds her nest in a dry, secluded spot, with choice clay, making several cylindrical chambers, which are smooth on the inside. After finishing the nest, she proceeds to find young spiders, which she stings in order to benumb them. After placing these in the nest, the eggs are deposited; and then she seals the chambers with clay. In due time the young grub feeds on the spiders and grows and bursts forth a wasp. So

each individual female performs this work without ever seeing her ancestors or her descendants. After a long cycle of life, the eel finally pays a debt of self-sacrifice to posterity. It has been fairly determined that the eel begins life west of Ireland, at a depth of three thousand feet below the sea level. The young eel rises to sun-lit waters as a flattened, transparent larva, three inches long, colorless except the eyes. It here lives many months in this stage on its own substance, becoming reduced to the size of a knitting needle. It moves to the shores after about a year, passing up the rivers, journeying at times as much as three thousand miles, finally reaching feeding grounds. After some years, a restlessness arises, owing to a reproductive instinct, and it migrates back to the deep sea, where its life ends in reproduction of its species. ("Vitalism" Revista di Scienza, April, 1911.)

Curious indeed are the life cycles of some parasites that infest animals and man. The hookworm lays eggs in the intestinal tracts of human beings. After these eggs are discharged into the soil in the embryonic state, they bore through the skin, usually between the toes, producing what is called "ground itch." After penetrating the body, these embryos find their way into the blood vessels and heart, and are finally caught in the lungs. They then bore through the air cells, and climbing up the wind pipe to the throat, where

they are swallowed, finally reaching the intestinal tract, they again become, in six or eight weeks, adult hook-worms.

Some scientists erroneously believe that all acts of unselfishness proceed from the experience of social relation; but a study of animal life shows that such acts are inborn. In man, self-sacrifice is not only the result of reasoning, but arises from an altruistic nature. While mothers, in animal life, usually show unselfishness in the care of offspring, at times the fathers exhibit the same instinct. There is a frog, called the obstetrical toad, which twines the chain of eggs about his hind legs and buries himself alive for two weeks, until they are ready to hatch. The male of the paradise fish makes his nest of foam, for the care of the young, and violently resists any intrusions on the part of the mother. After hatching, the father's affection amounts to mad fury, and he will ruthlessly murder another male fish that enters his threshold. The spider mother has to carry her brood sticking to her body; and in the Surinam toad, the eggs are placed on the back of the male; when they enter the skin, they make a pustule, from which the young is enabled to obtain nourishment. In the shark, the eggs are hatched within the body and retained for a time, and absorb blood serum for nutriment, and posterity is born an independent individual.

The order of nature in executing the law of the survival of the fittest uses no hospital for the sick

and disabled of the species; but pain is inflicted on those that are unable to cope with their environment. This is a beneficent order for the good of the race, and sacrifice of the individual must serve the general good. The divine purpose of nature must be carried out; for, under other circumstances, human life would not be endurable, and nature would be a conglomerate mass strewn with weaklings, which could be the cause of annihilation of animal life altogether. Nature must safeguard the future of animal life. This ceaseless warfare of animal life is more between individuals than species, for obvious reasons; but the weaker species must run or be killed, in the language of a naturalist. There is a family of spiders, called Arachnida, numbering no less than ten thousand species, each of which have a distinct contrivance for entrapping prey. The female spider eats her mate if she can catch him. Trout eats trout, pickerel eats pickerel. There is no neighborly love in animal life and they treat one another as rivals. One cow will lick and comb another in the most affectionate manner and a moment later will gore her to death. There is mating only in a few of the species and the mighty males usually propagate the race. The ostrich and eagle usually pair for life while doves and geese pair for a season. Bees rob bees and ants rob ants. The beautiful notes of the song bird are but strains of victory over the subdued or dead rival males. Snake bites kill twenty-two thousand

people each year in India. Pursuant to the law of survival of the fittest, all animals and fishes are murderers and cannibals. Some fish swallow larger ones by enveloping them like a glove, and others have a phosphorescent light to hunt for prey in the dark recesses of the sea.

Animal life is ever on the march; and in the firing line, the waning of power and lack of alertness are fatal. In every nook and corner of nature, some form of pain and death abides, and all animals are hunters and hunted, pursuers and pursued; and it seems that pain is a means of superior life. The shrike, or butcher bird, strikes down a wild canary and will kill his own kind for blood and brains; but the hawk soon sinks his talons in the shrike, and then the hunter's rifle brings down the hawk. It seems that animals in wild, never attain old age; because inactivity means death, and it is stated on good authority that a wild animal never dies a natural death.

CHAPTER II

MAN

Man is the most highly organized product of animal life; and there are evidences that his organism has undergone a process of evolution, as there are about seventy vestigial organs; such as appendix, tail bone, pineal gland, male breast, ear muscles, floating rib, third eyelid, tonsils, etc. At the same time, there are evidences that the reverse process of evolution has occurred. The history of human races shows that the processes of development and degeneration have had their alternate turns. No one has as yet offered a satisfactory theory of these processes. Whatever the biological history of man may have been, the intellectual and moral nature have remained unchanged as far back as the records go.

Man is the only animal that can live in all habitable climates because of his intelligent adaptability, by means of clothes, food, etc.

While organic life can be found in a range of altitude of eight miles, man can subsist at any elevation now within this limit, or even greater limits. The limits of temperature at which cell life is active vary from 150° F. to 32° F.; but the tem-

perature of environment may exceed these limits. The earth's surface furnishes temperature as low as one hundred below freezing in North East Siberia, and one hundred and twenty above freezing in Abyssinia. The temperature of the center of the earth is believed to be about ten thousand degrees F.; and that of the sun is supposed to be one hundred thousand degrees F. In the Congo region, the temperature varies in the year scarcely two degrees; while in Northern Asia it runs as high as one hundred and twenty degrees in summer, and as low as ninety below zero in winter. The Neapolitans would shiver when the temperature falls below zero; while the Swiss, with his means of protection, can be comfortable at a greatly lower temperature.

The inhabitants of New York suffer little from cold; while those in South Italy, who are ill-nourished and ill-clothed, die from cold. The effect of climate on life and health is universally recognized. Mortalities are higher in hot countries, especially among those not born there. Full maturity in hot climates is reached earlier; while the average length of life is shorter than in temperate zones. Old age sets in earlier, and the heat tends to cause a state of general relaxation. Mental and physical exertion is often harmful, and digestive and nervous troubles are more frequent. Cold is stimulating and greater efforts are necessary to procure food and clothing. The temperate zones stimulate energy and thrift;

while heat is monotonous, and cold is depressing. Moderate changes are uncomfortable, but wholesome. As a result of stimulation of environment, the highest development results; uncomfortable cold brings pleasant reactions. A cold shower after a hot bath exhilarates. Where food grows without labor, as in the tropics, indolence prevails, and ignorance and superstition result. Crisp winters improve morals and stimulate foresight; stupid ease and indulgence deteriorate character, and eternal summer and continual winter debilitate. The Negro is the result of the former; while the Eskimo is of the latter.

The discipline of the seasons establishes the supremacy of the white races. Cold, elevated plateaus produce tall, blonde men with blue eyes; while warm climates make short bodies with dark skin and eyes. The tallest people are found in Patagonia, and the Bororo Indians of South America frequently reach the height of six feet and four inches.

The center of culture rose in the Euphrates region of Asia, from which the Greeks and Romans sprang. The conditions of climate here were sufficiently variable for the development of human energies. When man is not prodded by sharp changes of temperature he lags behind in the struggle.

We then see, in a general way, that painful and uncomfortable influences of environment and of climate, under certain conditions, develop human

energies and have been the means of determining the superiority of certain races.

We shall next notice some effects of some painful influences on certain physiological functions.

CHAPTER III

RESPIRATION

From the foregoing remarks, it is obvious that a uniform temperature is not desirable for the function of respiration; for certain atmospheric changes, that are more or less abrupt, are necessary to bring about healthful reactions. Cold air provokes deep respirations, and opens up air cells in the lungs that otherwise would remain inactive. The various functions run by cycles, and it was not intended to have brisk breathing continuously performed. The surface area of the air cells is about 20 square feet, and there are about 5,000,000 air cells. Under ordinary conditions only a limited portion of the lung area is needed for respiration, and if there were no sharp reactions, certain air cells would become obliterated by non-use, for nature provides a surplus for reserve energy. There is a lining of mucous membrane in the bronchial tubes and air cells, that has what is called ciliated epithelium, which constantly creates a flow of the mucous secretions outwards, and the inhalation of a certain amount of dust, innocent bacteria, and foreign particles in the atmosphere, is necessary to keep the function in use. It has been proved by experiment that bacteria in the

atmosphere cannot enter the air cells under normal conditions because of these outward currents. When an animal is allowed to breathe infected air and is then killed, no germs can be found in the air cells; but some time after death, when the ciliated epithelium ceases activity, bacteria can be found in the air cells. This function may be overtaxed, however, under unhygienic conditions, and infection may occur. In the Arctic regions and 120 miles at sea, there is practically a sterile atmosphere, and an entire absence of dust. As a consequence, the Eskimo suffers no harm from the lack of activity of this function; but when disease happens to be present, he is very vulnerable; and when he goes aboard a ship, he contracts what they call " ship sickness," or an ordinary cold in a very severe form. Wounds in the Arctics rarely suppurate, because of the sterile environments. The annual boat to St. Kilda, one of the Hebrides Islands, imported an epidemic of colds. (Darwin's " Naturalist's Voyage.") Civilized man, however, suffers no harm from causes that wellnigh carry off the Eskimo. Iodine in the sea food, also, has antiseptic properties. The usual contagious diseases are conveyed by inhaling infection from the air. Some years ago the inhabitants of the Faro Islands suffered ravages from scarlet fever. In 1875 an epidemic of such a mild disease as measles carried off 150,000 Fijians.

As is well known, all the inferior races of man are more susceptible to tuberculosis, and even the

Negro still shows great susceptibility to the disease. The civilized man of the present has been subjected to these irritating influences for centuries by inhaling dust, bacteria, etc., and has, for that reason, acquired a resistance to such an extent that renders ordinary disease mild and less liable to be contracted, and is a better physical specimen than his savage brother.

Bad air has a vaccinating influence on its natives; while foreigners would readily succumb to infection. Dust in the atmosphere has a function to perform in making the air hold more moisture. In a cubic foot of city air it is estimated that there are forty-one million particles. Without this fine dust in the air the world would hardly be tolerable or even habitable by the human race. The vapor would not condense in the sky and in the form of clouds, but on the earth, on mountains, trees, homes, and clothes; so that the sun's rays would strike down upon us, oppressed with air, cloudless and saturated, and all objects would be perpetually streaming with moisture. (Smithsonian Report, No. 1072.) Not only has dust a function to perform in the lungs, but bacteria are constantly inhaled, and harden the resistance to infection. In London, a man breathes thirty-seven and a half million germs and spores in ten hours.

Nature seems to adopt the philosophy of adjustment in man, and, to accomplish this purpose, a prodding process becomes necessary. As pre-

vention, make a croupy child go barefoot, is a trite household saying. To correct an increased susceptibility to colds, infants and children can be hardened, so to speak, by beginning with a tepid sponge bath and gradually increasing the cold each day to a cold bath. So we need these vital reactions, which can only be brought out at times by painful or uncomfortable stimulation. Experiments show that cold, to the point of shivering, increases the assimilation of food; and the system may become inured to cold baths and winds to such an extent that exposure in the naked condition for hours will not affect the bodily temperature. A cold bath, while the stomach is empty, has its highest effect one and a half hours later. An uncomfortably hot bath, like the shivering cold has the same stimulating effect. As is well known, the Japanese are fond of very hot baths. A brisk wind, while more uncomfortable than a slight breeze, stimulates the system to the extent of not being harmed. The savages of Terra del Fuego have inured themselves to exposure, so that they suffer no discomfort by going without clothes.

CHAPTER IV

DIGESTION

In questions of food, absolute comfort is not consistent with the best results of active digestion; and perhaps more truly than in other functions, the reserve processes need to be stimulated. Animal experimentation has revealed much of the functions of digestion. Capsules of bismuth may be administered to a dog and the motions of the stomach, under external influences, may be observed with the X-ray; and by making a false passage, the secretions may be still further studied. It may be noted, by tempting a dog with appetizing food, that in marked hunger, the gastric juice will flow without the presence of food. Of course, extreme worry will have a harmful effect.

In infant feeding, the most careful methods of adjustment of food are required. It has been determined that a sterile food will not properly nourish an infant; and both pasteurized and sterilized milk have been to a certain extent discarded. It seems that a certain amount of germs is necessary to digestion. Infective bacteria are more active in milk that has been sterilized.

The question of germ life in the intestines has

been made the subject of curious study; and it has been estimated that trillions of innocent germs are discharged each day. In about 4000 known bacteria only about 50 are disease producing; there are friendly germs, and there are disease producing germs; the presence of the former is necessary to kill out the latter. In fact, many of the disease producing bacteria have less vitality than the harmless ones, whose presence would ensure the death of the former. The sour milk bacteria belong to this class, and Metchnikoff has advanced the theory that premature old age can be prevented by the buttermilk treatment. Many of the common ailments, such as premature old age, rheumatism, headache, neurasthenia, etc., are due to self-poisoning, by intestinal fermentation in the lower bowel. The fact of animals having long colons and short lives first prompted these studies. Science has now proved that feeding germs to kill germs is a fact. It has been shown that the woody fiber of vegetables cannot be digested by any of the digestive fluids; but this process has been reserved for the germs, which disintegrate the fiber, thus making it fit for absorption. The chemistry of digestion is not thoroughly understood, but advances are being rapidly made in the way of experiment. For instance, it was formerly believed that the human system could only appropriate a certain amount of proteid food, a standard of which was absolutely necessary; but it has been determined that,

by the aid of bacteria, the organism can generate proteids from non-proteid foods, for the purpose of digestion. This process takes place as we know in plant life. In leguminous plants the terminal rootlets are inhabited by germs which extract nitrogen from the atmosphere. The typhoid germs will hardly live and propagate in very foul water, because of the presence of other more active bacteria that are harmless. Drinking water that is semi-pure would more likely carry typhoid fever germs. It was formerly hoped that materia medica would give us an intestinal antiseptic that would cure these diseases; but experience has proved that a drug, strong enough to kill them, would be harmful to the patient, and we are led to depend on dieting and the introduction of belligerent germs that do not produce disease.

The experiment has been frequently made to prove that animal life cannot be sustained for a great length of time on sterile food and drink; so scientific medicine is battling with the *vis-à-vis* of germ life. Certain experiments show that chicks hatched in a sterilized medium and subsequently fed on aseptic food soon die, while others thrive after being given a certain amount of excrement from hens. (Schottelius, Arch. F. Hyg., 1908, xi, 177.)

We have learned that absolute comfort is not consistent with growth of digestion in infancy; for there are reserve processes that need to be called into play. When the infant is twelve

months old, the most natural and easy course for it to pursue is to depend on its natural milk; but experience has taught that it is better to begin a campaign of education of digestion at this age, for it would not be so successful if begun later on.

In prodding the infant digestion, acute disturbances may arise; but when this is over the effort should be resumed, and despite these disturbances, the digestion is left in a better condition. In many families of the poor and ignorant, infants are allowed to eat whatever other members of the family have. While some die, many thrive and grow in spite of it. The same food given to a scientifically fed baby would probably be fatal. Between these extremes there is a wise middle ground.

The same principle holds in the case of digestion of adults. The dyspeptic who sterilizes and predigests his food will continue a dyspeptic; and when the mind becomes centered on self under such circumstances, the troubles become exaggerated. There is a disease called sitophobia, or fear of food, which afflicts those that are under-nourished; and many of the so-called cases of nervous dyspepsia have this symptom. The stomach needs to be reëducated to food, and food must be taken though it produce pain; as strength is gained, this sensitiveness to pain is lost. The painful condition is an evidence of under-nourishment. If a patient feels that he cannot take certain foods,

it would be wise for him to eat a little of that food at the close of a meal, but always cautiously; thereby digestion of ordinary food will be increased. Perhaps cheese belongs to this class; it is good because of its indigestibility. Taken at the close of a dinner meal, it prods the digestive secretions.

In making a system of diet, a certain amount of ballast should be allowed; for not all the food content is supposed to go for nutrition, and by having a certain amount of residue, a greater amount of absorption is obtained. The languor and a certain amount of discomfort after a dinner meal are not inconsistent with the best interest of digestion.

On the other hand, painful hunger may have a wholesome effect; the man who never allows himself to get very hungry, will not attain the highest degree of digestion.

CHAPTER V

PARTURITION

Every marked change of the arrangement of atoms and molecules of matter is attended by more or less commotion; nature seems to announce great changes by violent disturbances. Hydrogen and oxygen gases in certain proportions, by the introduction of a faint spark, will explode and the formation of water will result. In the phenomena of life, the changes are more marked; and in ascending the scale of life a greater amount of commotion is observed. Great force is often displayed in the germination of plant life. A wonderful amount of force is displayed when such a small seed as the hickory nut germinates. Under certain conditions of heat and moisture, the swelling of the kernel is sufficient to burst a very tough shell, requiring great force.

No act in nature more justly deserves the title of physiological tragedy than parturition. "*Montes parturiunt, ridiculus mus nascitur.*" "The mountains labor, a ridiculous mouse is born." The ancients had a conception of the magnitude of the process as being out of proportion to the resulting product.

Much philosophical speculation has been spent in trying to explain the reasons for pain in childbirth. Some would urge that the artificial conditions of civilization have been indirectly the cause; but there is every reason to believe that the same process is painful in savages and animals. Contrary to the general belief, there is greater pain among women who do manual labor than among the well-to-do class, who are better fed and better clothed. Under all circumstances, it is usually the most painful ordeal that a human has to bear. Physicians are accustomed to estimate the normality of the function by a certain amount of pain; while painless labor is looked upon with serious concern, for in this class of cases, convalescence is usually more protracted. It has been calculated by good authority that every pain involves a force equal to five hundred pounds, and the average duration of a pain is one minute; placing the average frequency at five minutes and the average duration of labor at five hours, would make an expenditure of thirty thousand foot-pounds of force.

From continued pain, the sensibilities become obtunded, and the exhausted state perhaps lessens the amount of suffering, but this is more or less true under any circumstances. This would suggest the query as to whether or not the joys of maternity and the new, interesting cares do not serve to obliterate the memory of pain.

We all recognize that reproduction, with sub-

sequent cares and responsibility, is the normal course of life for women; and when it is avoided, there is in the majority of instances a sense of incompleteness of all the functions of life.

CHAPTER VI

INFANCY

The first pain perhaps that is ever felt is when the cold air strikes the bare skin of a new-born babe, and probably provokes the loudest cry of infancy. This phenomenon ushers in a series of processes that perhaps are more difficult to understand than any of the physiological functions. During fetal life, the blood does not circulate through the lungs, but is pumped through the umbilical cord to the placenta, where oxygen is imbibed from the mother's blood. When, however, air strikes the skin, a sudden inspiration draws the blood to the lungs, and the false valve in the heart becomes obliterated by the changes of the blood current.

The shrieking cry would impress the casual observer as being acutely painful; but to the intelligent, it gives a feeling of relief. The baby that does not cry is to be looked upon with alarm. Feeble infants are frequently prodded by striking the soles, or else spanked, to provoke deeper inspiration. Not only is this true of the early hours of life, but it is true throughout the period of infancy; and when the child falls short of its quota of crying, it should be made to do so, for

this is about the only form of exercise available. While extremes are undesirable, a certain amount of fretting and crying is necessary for the child's proper development. The squeal of the babe is its only means of calisthenics, and crying stimulates the circulation of the blood. The babe does not get its quota of exercise, unless it cries an hour a day. The common mistake of stuffing it does not relieve, for squalling is the clamor for health. The first efforts of walking are anything but comfortable; and bumps and bruises go hand in hand with rapid growth. The wearing of shoes at first is uncomfortable, but by continuing the process, becomes comfortable.

We wonder why nature does not endow the child with the ability to walk without the effort of learning, as in the case of some animals. This preliminary lesson is the beginning of the school of life for effort and discipline, which has been wisely ordained. We wonder also why the child cannot intuitively know that fire will burn, and that the loss of equilibrium may break a bone.

The characteristic restlessness of childhood seems to be one of nature's safeguards against inactivity; for activity is all essential to substantial and healthy growth. Perhaps every one remembers the painful fatigue and leg-ache, sometimes called growing pains, after the daily rounds of childhood's sports.

Education of the muscles can only be gained by rigid training, and skill comes only after painful

fatigue. In the massage of muscles, development may be gained by rough manipulation, when milder treatment would not suffice. An acrobatic performance seems so easily made; yet it is the result of years of painful labor in accomplishing certain feats. In order to develop hardness of muscles, pugilists employ others to pound them in order that they may withstand the blows of an opponent. Artisans in the innumerable trades attain skill from the hardships of years of training. It requires ceaseless activity of many muscles to keep the body erect; many of our educated, normal functions have been wrought by painful experience, or arduous effort.

CHAPTER VII

FATIGUE

Probably no one will doubt the assertion that a certain amount of muscular fatigue may be painful, yet consistent with the best interest of health, and is even necessary to the highest development of strength. There is a standard of physiological fatigue, which, if exceeded, becomes abnormal. There must not be so much exhaustion that it cannot be promptly repaired. It is safe to say that the capacity to suffer psychic distress without harm can be increased; but such standards of spiritual vitality must vary, and by exercise this capacity may grow. But psychic pain to be wholesome must always be accompanied by a hope of some good resulting. The exactions demanded by life's activities warrant more culture in this regard; for by this, higher standards of character are raised; and without such exercise, deterioration will ensue. Psychic troubles, like fatigue poison in the muscles, must be eliminated; and each twenty-four hours must repair the damage, so that accumulations from day to day will not produce worry and self-poisoning. The system can only bear the waste product of each day without harm; and when accumulations increase from day

to day, harm will result. A similar occurrence is noticed in the administration of certain drugs, such as belladonna, digitalis, etc., in which all of the drug is not eliminated in twenty-four hours. If the dose is given, say three times a day, continuously, a residue accumulates, which finally causes symptoms of acute poisoning; and for this reason, digitalis is said to have a cumulative effect, which all physicians are careful to guard against.

The same is true of muscular fatigue and all forms of work; and when the night's sleep fails to knit all the raveled yarn, damage results. Fatigue poison is now believed to be the cause of normal sleep. The functions of the body run in cycles of twenty-four hours, as in eating, drinking, sleeping, etc. Notably the intestinal evacuations occur at a certain hour of the day; and, if from neglect, this habit is lost, it is difficult to regain under any sort of medical treatment.

The poison of fatigue has been made the subject of curious study. Experiment shows that the blood of a fatigued animal may be injected into that of one in a normal condition, and will produce symptoms of fatigue as in the original. There are two classes of functions in the body: vegetative and voluntary, and fatigue is the result of undue tax on the latter; while disease inflicts poison on the former, and in either a certain amount of toxin can be easily taken care of. It is necessary that muscles should have exercise, even to the point of painful fatigue, to obtain the highest

form of muscular development. Nature rises to the occasion in promptly eliminating the fatigue toxin, which function would deteriorate by inactivity. When, however, this function is abused, the system may not become conscious of fatigue to the extent that actually exists; as the excess of toxins benumbs the sensibilities, especially if there is left over any toxin that may have accumulated from previous days. Overwork and fatigue do not necessarily coincide; for ironworkers, blacksmiths, athletes, etc., are overworked, but do not suffer fatigue. Such labor is destructive to the best interests of health. The fatigue toxin in this instance is cumulative; and the excess from day to day benumbs the sensation of fatigue, which under these circumstances is viciously progressive, causing structural changes, due to overtax and expenditure, and finally impairment of the nutritive processes. So we would conclude that painful fatigue, to be normal, must be repaired within the cycle of twenty-four hours. Similar conditions of fatigue exist in other functions than that of muscles. Bad habits of eating, sleeping, etc., and also faulty psychic habits, when carried beyond the limit of physiological fatigue, create distress, weariness, incapacity for neuro-muscular coördinations, mental distraction, inattention, retardation of thought, etc.

After a time, the sense of rest is not longed for; and finally a stage is reached, where the functions are whipped by the fatigue poison into excessive

activity; which, like the delirium of fever and the sleeplessness of the insomniac, soon exhausts the organism. Nervous dyspepsia, hypochondriasis, and a long train of nervous symptoms set up, and may easily lead to insanity.

Under normal, physiological conditions, the professional man or laborer meets his task of the day with no disabling tissue memory of yesterday; and nature wisely intends that each twenty-four hours shall be made a unit of life with no burdens of yesterday to cramp the activities of today; but we should acquire an increased resistance to fatigue, to endure more, and to give a greater capacity for the work of the morrow.

CHAPTER VIII

DISEASE

Pain relieves pain, poison antidotes poison, disease cures disease. So runs the philosophy of pain of human ailments.

The powers of nature, under certain conditions, to cure disease seem to be dormant, but may be roused into activity by exposure to infection. If a man could be reared on sterilized food, and could remain all his life in a sterilized atmosphere, and could then be suddenly thrust into the environment of the present-day, civilized man, the ordinarily innocent bacteria would, so to speak, eat him up. It is very probable that the infection of an ordinary cold would be fatal in a short while; and his first taste of cheese would probably cause him to succumb to ptomaine poison. Violent symptoms of indigestion would follow his taking the simplest food. So if man is to live under conditions that constantly expose him to disease, he must begin to learn the lesson of immunity. The Eskimo is made very sick from his first exposure to the infection of a cold; but, were he to continue to be exposed, he could acquire a certain degree of tolerance. It is well known that the savage races are more susceptible to infectious

diseases than the civilized man. The progress of civilization that now exists will read the annihilation of the savage by importing bacteria into his realm. So the burden of the savage is the pain of the susceptibility to disease; and his salvation can only come from exposure to infection, or he will be lost in the race of evolution in immunity. The civilized man is fast overcoming the evils of crowding by improving his sanitary methods. It is a notable fact that nearly all the infectious diseases have become less virulent through attenuation, hastened by improved sanitary methods. The query arises, What would be the ultimate result of the entire disappearance of infectious disease? In view of our present scientific conception of the nature of immunity from disease, we are led to believe that as soon as man ceases to be exposed to infection, nature will cease, from the lack of stimulation, to manufacture those antitoxins, which now are stored in the blood to ward off certain maladies; and the human race will revert to the condition from which man has been emerging for centuries. So our hope for continued immunity must depend on the continued presence of bacteria, without which the store of antitoxin will soon be exhausted. In view of these conclusions, we should not obliterate disease altogether, but retain enough to stimulate the manufacture of antitoxin. It is, perhaps, true that the average New Yorker is exposed to more, but less virulent, bacteria than his great-grandfather inhaled a cen-

tury ago. It may be true, however, that some bacteria of disease have been reduced in virulence; but the main reason for man's betterment is due to the fact of better environment, purer air, and more wholesome food. The South Sea islander put under the best hygienic surroundings, will, in New York, just as readily succumb to tuberculosis. From the lack of prodding of the blood corpuscles by the tubercular bacilli for centuries, the inability to resist infections would mean prompt death. The ideal state would consist, not in the total obliteration of disease, but the retention of a certain amount of harmless bacteria, to keep up the stimulation of the production of antitoxin, yet not enough to make us ill. If a human race were shut off from measles for a thousand years, its reappearance would be a greater scourge than yellow fever was fifty years ago and at the same time, were all of the tubercle bacilli destroyed, their sudden introduction would kill every individual they infected, whereas now over ninety per cent. undergo spontaneous cure. In the light of recent knowledge, better sanitation not only improves the standards of vitality, but it also dwarfs the race of bacteria, and man gets gain from these two sources. The bacteria that fight a losing battle are not destined to be as virile as others; for many of the families of bacteria have different degrees of virulence. This fact, together with different degrees of vitality, accounts for the variation of disease. For instance, in the treatment of

blood poison, an injection of a solution of the dead bacilli is made use of with encouraging success; but it is much better to cultivate these bacilli to be used for treatment from the wound of the patient to be treated. The serum thus used is called autogenous.

The foundation of the serum treatment rests upon animal experimentation, or vivisection, without which no progress could have been made; the dosage of serum has been standardized, as in the case of drug treatment.

The pain that is inflicted is for a wise purpose and must be physiological.

The inborn immunity from disease that certain individuals possess, probably result as much from the degrees of ancestral exposure as from any other cause; although different individuals have different conditions of environment. Certain physicians making post-mortem examinations are liable to accidental inoculation, most of which are harmless; but occasionally such infections prove to be very virulent. One authority has advanced the theory that the tonsils have a function to perform in being incubators, which furnish enough bacteria to keep the system hardened, or immune. However, this function may tend to excess, owing to abnormal conditions of the tonsils, in which case they should be removed.

Darwin's theory of natural selection applies to man in his relation to bacteria, as selection implies selective mortality; but the fittest survive and the

unfit perish, as a rule. Those less immune to disease, die sooner from infection than the hardier individual, who, as a rule, is left to propagate the race. The modern civilized man is the survival of the fittest in the warfare between human vitality and bacterial infection. For the same reason, those in the slums of great cities frequently die young; and the remainder, who survive the fight against infection, are left to propagate the race, and a certain degree of immunity has at last been reached. The Jews and Chinese have been for centuries more exposed to slum life; and instead of being degenerated, they have undergone a protective evolution, and now furnish excellent specimens of vital resistance, owing to the fire of infection to which they have been exposed.

The race does not suffer from disease, if death is escaped; for by that means, individuals acquire a protective immunity that goes to strengthen the race. This explains the advantages the civilized man has over the savage. The fittest of the former have propagated the race; while the unfit have been left among the savages, undisturbed by disease. Disease has well-nigh obliterated the aborigines of Australia and New Zealand; and Great Britain has imported the fire of disease. The treatment now given tubercular patients will probably give them the average length of life; and it is reasonable to believe that their descendants may become more and more immune, for we now observe that the disease is becoming more

treatable. It is reasonable to believe that the present race of tubercular patients will beget a race that can even fight tuberculosis more successfully than their ancestors. The same history has been repeated in America. When the Indians were driven back by disease, even if they had had the intellectual and social environment of the British, their vulnerability to disease would have been a cause of their annihilation. The greater susceptibility of the negro to disease gives him a much higher mortality rate, which ultimately will produce annihilation, unless he can survive the exposure to bacteria for several centuries. The negro is more susceptible to all the infectious diseases, such as tuberculosis, pneumonia, syphilis, etc., than the white man. He, however, is less susceptible to malaria and yellow fever, because of ancestral exposure to these diseases. In the west coast of Africa, negroes have been exposed to malaria for thousands of generations, and are little harmed by the malarial germ; while the European would succumb to infection.

The race that is not depopulated by disease, will gain increased resistance from the presence of infection. If Americans were crowded in the filthy environments that exist in China, typhoid fever would become uncontrollable; but, as matter of fact, the Chinese suffer very little from this disease. Yet the conditions for the spread of infection are as favorable as can be imagined.

The method of getting immunity from disease

is nothing but a process of vaccination extending over centuries. A more rapid method is made use of by the African Vatuas, who by repeated inoculation of snake venom become immune to the poison,— one-twelfth of a grain is ordinarily sufficient to produce death. Vaccination is a means of gaining immunity from smallpox by substituting a milder infection, which is believed to be a modified form of smallpox; and the immunity is as positive as the smallpox itself.

Little or nothing is known of the chemistry of the poisons produced by bacteria, as there is nothing in the chemical world which approaches the intensity of these toxins. The toxin of lockjaw germ is the most poisonous of the bacterial group; one-twentieth of a grain being fatal to man. These poisons, like snake venom, require to be inoculated to produce death, as they possess such an unstable chemical nature, that the process of digestion usually renders them inert.

The process of using the poisons of bacteria to harden the system against disease is made use of to prevent as well as cure the malady. It is now the standard treatment of tuberculosis to inoculate the patient with very small doses of a solution of the dead bacilli, in such quantities as will only produce a slight reaction, for an excessive quantity burdens, rather than hardens, the system, and different temperaments require different amounts. Too much of the remedy runs the temperature up

and is harmful. By extending this process over a year or two in incipient cases, marked curative results may be obtained. The same method is applied in the treatment of hydrophobia. The process of inoculation is carried through a dozen or more rabbits; and the spinal cord of the last of the series is prepared into a solution, which is then injected into the blood of the patients every day for two weeks. These repeated doses of a solution of the germs, stimulate the production of a sufficient quantity of the antidote in the blood serum to counteract the fatal infection of hydrophobia, which usually comes in a period of three to six weeks.

In like manner the dead bacilli of diphtheria are injected, in increasing quantities, into the blood of the horse, until he finally becomes immune to the poison in any quantity. The blood serum of the horse is drawn, and sealed in tubes ready to be injected under the skin of children suffering with diphtheria. The most striking effect of this antitoxin, however, is to prevent diphtheria altogether before the child becomes ill.

The germ of the ordinary boil is called the staphylococcus; and when the boil begins to develop, an injection of two hundred million of the dead germs will arrest the further progress.

An injection of five hundred million dead bacilli of typhoid fever, followed by a billion ten days later, will prevent the development of the dis-

ease; while two hundred and fifty million daily, in increasing doses, at the beginning, will arrest the process of typhoid fever altogether.

So we see, in a general way, how prodding man's vitality with dead bacilli will not only prevent disease, but will arrest disease that has already begun. We are, therefore, warranted in believing that, in time to come, man's blood will be stocked with this antitoxin, from continued exposure to the attenuated forms of disease, and the serum treatment will have become obsolete.

CHAPTER IX

PHAGOCYTOSIS

We will next observe how the blood kills and disposes of bacteria. This curious process is called phagocytosis.

Lord Lister once said: "If ever there was a romantic chapter in pathology, it has surely been the story of phagocytosis." When bacteria gain entrance to the blood, they are assailed by the white blood corpuscles and are eaten up, if not too numerous, by the corpuscles, called the leucocytes, which first envelop the germs and then proceed to digest them. If the bacteria are too numerous and virulent, and if the leucocytes are lacking in vitality, a fatal infection will ensue. So, for nature successfully to combat infection, the system must furnish leucocytes that are well nourished, for these are the body-guards of man's vitality. Then, too, the bacteria must not be too virulent. A stranger phenomenon arises in the presence of bacteria. Millions of leucocytes concentrate in the infected area, and engage in hand-to-hand fight with the bacteria. Perhaps no battle in the history of warfare would compare with the activity of the bacteria and leucocytes, that takes place in an ordinary boil.

In every three-fiftieths of a cubic inch, there are ten thousand leucocytes and four hundred times as many red corpuscles; and in the human system, one-eighth of the body's weight equals the total amount of blood. For a man weighing one hundred and seventy-five pounds, there would be twenty-one and eight-tenths pounds of blood; which, having a specific gravity of 1.028, reduced to gallons would make the total measure of blood two and six-tenths gallons. In every ounce of blood, there would be about three million leucocytes; and in the total quantity, there would be about one billion sixty-four million two hundred thousand soldier-guards, and the number of red corpuscles would be four hundred and twenty-five billion six hundred and eighty million. In the presence of infectious disease, the leucocytes are increased two or three times, and the presence of disease naturally stimulates their development; but in overwhelming infections, as in virulent cases of pneumonia, diphtheria, and in general peritonitis, their number falls below normal and is, of course, a bad omen. So man has in his blood an army of soldiers of vitality equal to the number of the earth's inhabitants, with a possibility of increasing this fighting strength two or three times, against disease.

If there are not enough leucocytes to engage the bacteria in a hand-to-hand struggle, the enemy will invade the system and work disaster. But when each bacterium is promptly met by an agile

leucocyte, they both go down in a death struggle, and a pus cell results. So every pus cell means a dead hero. The hard swelling around a boil is nothing but a reserve number of leucocytes, to make a bulwark against an invasion of bacteria. In the worst types of blood poison, this swelling is absent; when suppuration becomes active, it is evident that the system can furnish enough leucocytes to match the bacteria. If, however, the bacterium is comparatively harmless, the leucocytes simply envelopes him and pursues a course unmolested.

When these leucocytes are under-nourished, these soldier guards will attack the blood pigments and red corpuscles, and a form of anæmia will result. Perhaps one of the strangest phenomenon in cellular life and the animal organism, is the influence, or commanding general, that directs the concentration of these soldier guards. This might be called the spirit of vital resistance, which works independently of the consciousness of man. In addition to the vitality of the leucocytes, there exists in the blood a substance, called opsonin, which has a restraining effect on the bacteria; and when this is present in quantities, the leucocytes wage an easier warfare. The activity of the leucocytes and the quantity of the opsonin explain the nature of individual resistance to disease. The artificial introduction of bacteria into the blood raises the vital resistance by stimulating the production of opsonin. This process is made use

of in various ways in the treatment of infections. So we see again, that the blood can not only be trained to endure the presence of bacteria without harm, but can also be trained to kill the bacteria more promptly.

When the index of vitality is at its highest point, the presence of bacteria of ordinary diseases produces no harm. Doctor Wiley, of the Agricultural Department, advances the opinion that typhoid bacilli may be drunk with impunity, when the system is at its best state of health. It is well known that the bacteria of tuberculosis, diphtheria, typhoid fever, etc., can frequently be found in healthy individuals; but when the system becomes fatigued, worried, or under-nourished, the chemistry of the fluid of the blood becomes altered; so that these ghouls of the bacterial world are no longer restrained, and disease runs riot.

It verily seems that the war of survival of the fittest is continually waged between corpuscles and bacteria with even greater severity than is found in the animal kingdom. In view of this, our vitality becomes a product of this painful struggle; and again we might inquire, do we not owe our strength of vitality to the presence of germs?

CHAPTER X

PAIN

Pain is closely associated in our minds with disease or injury, and, while almost a constant accompaniment, is by no means an index of the severity of disease. Pain is the red light in the railroad world of our nerves, and signals for relief from some obstruction or disorder in the vital processes. Without the existence of pain, irreparable harm would often be inflicted on our bodies before the discovery of damage could be made. The nerves act as carriers of these impressions to the brain, where such impressions are recorded; and when we consider the number of spots on the body that can be localized by the pricking of a pin, we can comprehend the number of nerve fibers that can carry individual impressions. When sensation becomes paralyzed, pressure and slight irritation may produce ulceration, such as bed-sores, because the sensation of pain fails to be recorded.[1]

[1] Division of the nerves of the face by intercepting pain may cause inflammation of the eye. Injury to the spinal cord destroys the sensation of pain from pressure and leads to the formation of bedsores. Division of the pneumogastric nerve usually causes gangrene of the lungs. The loss of sensation leads to defective nutrition and death of the tissues. So the sensation of pain is the body

Sometimes the nerve fiber may become excessively sensitive, and ordinary irritations produce extreme suffering. The pain of the toothache, or a felon, may be borne without much suffering the first night; but, from exhaustion and lack of sleep, the nerves become more sensitive, and the suffering finally becomes unbearable. The hard swelling is thrown around a boil, or abscess, for a purpose, as previously explained; but incidentally this swelling makes pressure on the nerves, and the sensation of pain is realized by the brain. Without pain under such circumstances, the proper safe-guards would not be taken to protect the inflamed part. A small boil in the bony canal of the ear produces excruciating pain, because of the great pressure, in a closed canal, on the nerves. The same is true of an abscess under the palm of the hand, where the tissues are very tough, and it is sometimes called " frog felon." Pain may have

guard of vitality of tissues. The pain from cancer is produced by the enormous proliferation of foreign cells that thrive by eating up the starved normal cells of the body. The exact cause of this process is as yet a mystery to medical science. It is like mushrooms that grow from decaying vegetable matter. " Every pain has its distinct and pregnant significance if we will but search for it." The pain of an inflamed joint compels a relaxation of muscles that nature may cure the disorder. An inflamed appendix makes the patient draw up the right leg that nature may limit the diseased process. The surgeon would be confused as to diagnosis were not pain nearly always present over the appendix at a certain point called McBurney's point. The interpretation of pain is one of the fine arts in diagnosis.

a conservative effect on disease, for the organism is impelled to seek a position that will render the disease less active. Pain in pleurisy is caused by the friction of rubbing of the lungs against the chest wall, when the lining membrane is roughened by inflammation, and is the call of nature to keep the inflamed parts in an inactive condition. This is facilitated by strapping the chest with adhesive plaster. The headache of biliousness indicates that certain poisons from indigestion are being absorbed into the circulation of the brain. The headache then has a reflex effect in causing vomiting to dispose of the poison. The pain of griping is but the effort of the intestines to throw off some irritating products of undigested food. It would work disaster to be insensible to pain; while on the other hand, to become hyper-sensitive to the various causes of suffering, would stimulate more prudence in avoiding the causes of pain. Fainting is caused by a slowing of the heart to such an extent that circulation in the brain is retarded, thereby causing unconsciousness, which causes the patient to fall, after which the recumbent position is sufficient to reëstablish the circulation.

Pain may arise from the following causes: 1. An inflammation along the course of certain nerves, such as neuralgia, from certain poisons like rheumatism, causing burning sensations, soreness, etc. 2. Disturbance of nerves from the viscera, which causes colicky and cramp pains. 3. Deep nerves that cause numbness, burning, smarting, etc. 4.

The external surface of the brain may be extensively diseased without causing any pain. There are two classes of pain: those from nerve irritation; and those, where the conscious centers are hyper-sensitive, and have pain where no disease of nerves can be found. The one intensifies the other, and vice versa. Where the pains are mental, the patient suffers from fears and doubts, tormenting ideas, depressions, and panics. Such pains may be referred to a sore spot on the side of the head, and, at times, feels as though a wedge were driven into the top of the head. The *globus-hystericus* is a feeling as though a ball was rising in the throat, causing choking. There may be a feeling that the head is a vacuum, sinking feeling, an undue susceptibility to disagreeable sensations of noise and certain sights, nausea, vertigo, etc. A case is related of a woman, who, after a long absence, met her son, who firmly grasped her hand. The next day great pain was experienced and the hand was bandaged. The pain was so persistent, that a surgeon was called in. He resected the nerve of the arm; but still the pain persisted, and finally she was told to leave the hand alone, and she recovered. In this case, the pain existed in the brain center. This is called " attention pain." Another patient has been reported, who suffered extreme pain in the knees, which was intensified by vibrations to such an extent that he could not travel by boat. He recovered by reëducating his sense of pain. Concentration of attention under

certain conditions develops this class of pains, and the cure depends on reversing the psychic process. Some neurasthenic and psychasthenic patients complain of very peculiar sensations, such as bursting pains in the legs, twisting, jumping, and crawling feeling, sensations of heat and coldness, etc. Such patients, strange to say, may laughingly describe these sensations, and actually suffer in mind. To ridicule such complaints is just as serious as to ignore a cripple from rheumatism.

Disease has been defined as a perturbation of normal activities. Nearly all of the infectious diseases are attended with an exaggeration of the normal functions. The temperature is almost invariably raised, and the pulse usually becomes accelerated. The toxin, having been absorbed into the blood, stimulates the processes of metabolism; and, while the intake of food is diminished, the waste is greatly increased, and cellular activity is raised to its highest pitch. The exaggerated activities continue to almost the point of death, and sometimes after; for it has been frequently noted that the temperature remains high after death in yellow fever, and in nearly every death from infectious disease, the temperature reaches its maximum intensity a few minutes before dissolution. A very high temperature is hardly ever found except in a moribund condition, and it is rare to observe a recovery after the temperature of one hundred and six degrees is reached.

Health may be defined as a condition of comfort

and well-being, that is attended by a perfect balance between the amount of food taken and the waste eliminated. Warmth is at first agreeable; but, if the temperature is greatly raised, the sensation becomes one of torture. Yet hot applications, which at first are uncomfortable, when pursued, become soothing. So we see that the conditions of health and disease are not different in kind, but different in degree; and the sensations of pleasure and pain occupy a similar relation. A strange paradox arises, that pain may become necessary to secure a pleasure, just as disease cures disease.

PART II

CHAPTER I

INTELLECTUAL EFFORT

As we ascend the scale of animal life, we find the functions growing more and more complex. As man is the most highly organized animal, we find his functions become more complex in going from the organic to the intellectual and moral life. The capacity to enjoy implies a susceptibility to suffer. While animals frequently suffer physical pain, their enjoyments are in like manner limited to the physical. But in man, more complex relations exist; and it is safe to say that physical pain is very small compared to the aggregate amount of human misery. Man's efforts to attain health are important and necessary as a means; but they do not attain the philosophy of life. The lack of health did not prevent Fame from crowning the heads of Darwin, George Eliot, Mr. Browning, Beethoven, and Spencer; but it is probable that their attainments could have been enjoyed more, had their physical lives been more in accord with the laws of nature.

Failure in the intellectual life of man does not cause physical pain, but a discomfort far worse, such as disappointment, hopelessness, chagrin,

humiliation, etc. These are painful nevertheless, and only by means of human effort can such a calamity be avoided. To avoid such painful results, painful efforts are at first required.

Life is a school that every man must attend; and the responsibility rests upon him of studying the lessons furnished and of solving the problems that must arise. Should he shirk these responsibilities, he thus far fails of his opportunities, and disappointment and unhappiness must result. When we attempt to discern the nature of health, ease and contentment, we see that such desirable states are governed by antitheses. We have seen how health is the product of the battle of bacteria with man's powers of immunity. When we ascend into the higher spheres of existence, opposite conditions bring about other desirable states: adversity and failure must play a part in success; suffering is a means to joy; unselfishness begets sympathy; troubles and temptations chisel out character; effort is needed to bear pleasure with equanimity, just as effort is required to endure pain. Whittier says: "There is life alone in duty done and rest alone in striving," and a prominent psychologist has said that a man ought to do regularly every day two or three things he particularly does not want to do just for practice and we must not follow nor be led by our pleasures and pains.

Painful efforts mark the beginning of our intellectual careers. Perhaps every one has a vivid

recollection of the first difficulties in concentrating the mind. Memorizing words and sounds and the incessant repetition of the multiplication table verily seemed the excess of monotony. Could we have learned without effort, our knowledge would have been valueless. It is safe to say the greatest value of an education consists not in the gain of knowledge, but in the training of the mind. Many a son of wealth yields to the temptation to drop out of school, because it requires too much labor to take a college course; in the case of the poor boy, great effort is required to get the means to go through college, but greater still is the effort of the mind to assimilate the college course. The student, who can lead his class without hard study, will not be well educated; his measure of success will be an evidence of the fact. Genius plays but a small part in securing the desirable attainments of life. Poverty has its load, wealth carries responsibilities, mediocrity has a task to perform, and genius must bear its burdens. Emerson's law of compensation runs through every human effort. It is idle to stop to inquire why this is true as we must accept the fact. Uniform health, perfect peace, comfort, and satisfaction, without effort, are not physiological, and cannot be appreciated as such without following the laws of compensation. A pleasant vacation cannot be enjoyed without a season of hard work and study; and a college degree is prized only because of the effort that is expended for it. Perhaps one of the most

painful efforts of life is made by the student in his college course because he knows that he will be held accountable in the final examination for every subject gone over in the course of study. The boy who has been trained to strive, is already on the highway to success. Brains and energy are essential to any form of success, but energy perhaps plays the greater part. Many a brilliant intellect has been buried in indifference, solitude and ignominy; while the man, whose one talent has been energized, wins with great satisfaction to himself and respect from the world. Success in the eyes of the world may be a different quantity from what it is to the possessor. Comprehensive success must combine both.

Man may win fame at the expense of every effort and sacrifice, ignoring every other consideration; but such an attainment will not be worthy, unless something more than personal ambition is expended. The lack of effort is a much more common defect. The masses pursue the course which offers the least resistance; and, as a consequence, they are known but little to the present, and not at all to the future generation. It is safe to say that no man with ordinary intelligence was ever, to any degree, satisfied with himself throughout life, who has not taken a hand in the world's activities. Some rise to the realization that effort must be made in the physical decline of life and then try to redeem past opportunities; but such a predicament is nothing less than pitiable, for no

one can enjoy rest who has not labored. The broadest meaning of success may be defined as the attainment resulting from the greatest effort guided by worthy motives which must harmonize with the ideals of human aspirations. The greatest gift to humanity may not conform to the highest form of success; for no man can be a true benefactor unless he can eliminate selfish ambition. Not every man of fame is worthy to be imitated. The greatest genius of the age in electricity is Edison. His material gifts to humanity have been manifold, and his fame will reverberate through centuries. His recent attempt at theology, revising moral classics that are accepted by more men of brains than ever before in the history of religion, cannot command imitation. In so far as our comfort and success are dependent on electricity, we are thus far indebted to Edison; but electrical inventions have not materially improved the ideal of human activities, and the electrical age has not wrought any change in the nature of human aspirations. Plato's Dialogues are the classics of the day.

It would be an unwise law of compensation that would defeat the reward of an honest tenant of the land of his landlord, when he labors hard to coax the soil to produce a good crop. His success should be commended as partaking of the qualifications of the greatest event of history. Many an infant opened its eyes the day Lincoln was born, and many of these labored as hard as the martyred

President and their successes were as great in proportion to the effort expended.

All just laws, philosophy, and religion must apply to human nature in its various environments. Fame may be a burden to its genius in winning broad success, which must satisfy not only the possessor, but certain classical ideals that have been recorded in the history of human nature.

Painful effort, like disease, can be carried too far, and instead of being physiological becomes pathological. Of course, much effort is alluring, and therefore pleasant; but some effort is painful and still wholesome in the end. Condiments in certain quantities prod the digestive secretions, while in greater amount they would be distinctly harmful. Effort that is at first painful may finally become pleasant. We can readily see that every endeavor, that is at first laborious and later comfortable, must be normal and wholesome. But if such energies become cumulative in growing more irksome, they must be abnormal. So physiological pain has certain limitations.

It would be difficult to contrive a set of circumstances for a young man, an heir to wealth, who would imitate the environments of his father, who began his career penniless and whose poverty laid a foundation for success by stimulating great effort.

Effort that is not followed by success is more compensating than success free-handed.

The problem of charity is to help the helpless

to help themselves. Many great fortunes would be freely donated by philanthropists, if such benefactions could be made to restore delinquents to self-sustenance; but men of wealth are too wise to squander their fortunes by pauperizing the indolent class with money, and they recognize that effort alone can redeem the poverty-stricken class. It may be seriously questioned whether the millions spent for philanthropy really accomplish good, or really relieve poverty. The rebound upon the donors is the greatest good accomplished, perhaps. Some even argue, not without reason, that free education will mis-carry; that the effort needed to get the means is almost as essential as the effort to take the education.

Success in a business undertaking cannot, necessarily, be measured by the remuneration that may follow. While money is frequently the measure of success, it may play but a subordinate part, or else may not enter into a consideration of the transaction.

A lawyer, or a physician, may succeed nobly, yet fail to make money; many men of eminence have won fame which failed to render a financial return. A lawyer may win his case on some fine point of law, yet be satisfied without a fee; for his labors have gained the satisfaction of winning over his opponents. The surgeon may cure the malady, and rescue his patient from a desperate crisis, by some operation, and the fee becomes a secondary consideration in his mind. Each would prefer

smaller fees with successful issues of the cases than vice versa. Many a successful business man would admit that money was not his chief aim. While financial gain is usually an accompaniment of the successful undertaking, it cannot measure the attainment. So there must be an abstract ideal of success that all worthy men strive for beyond the question of material remuneration. No other accomplishment will take its place, and public opinion does obeisance to this ideal.

Honest effort to succeed over wrong methods will bring a form of success that will be gratifying to a greater extent.

CHAPTER II

COMPETITION

A keen sense of competition in the line of human activities brings about an uncomfortable feeling that goads ambition to greater energy, without which such powers would remain dormant. Every busy man's experience can testify to that fact of human nature. A man may believe that he has done his duty and vows to himself that he will do no more; but when a competitor appears who will go the twain mile, he then discovers for the first time, perhaps, that he has not done his whole duty. At first he becomes rebellious to such an influence, but later acquiesces, and finally perceives the value of such experience. There is a very small difference between prominent success and ordinary achievement. The winner of a horse race has only a few seconds the advantage of his competitor, and the first honor graduate wins by a small fraction; yet the result of the difference is far-reaching.

The query arises as to the ethics of honest labor in overcoming legitimate effort. It is a law of human nature that the best that is in us can only be brought out by painful striving; so runs the law of all progress in life. The one who falls short

of his ambition, after expending his best energies, is bettered thereby, although he may have failed to win the prize. He can thank his opponent for bringing out the best that is in him; and, even in defeat, he should be broad-minded enough to accord superior skill to his opponent.

Perhaps every one who has performed faithfully, experiences a stinging feeling when another comes along and does the duties we once had, even in a better way. His first feeling is to criticise and rebel; but later he realizes that his best energies were not developed, and he thus becomes better prepared for the future. Of course, the element of brains has to be considered.

It has been argued that the world cannot practice the Golden Rule in the business of competition, but any honest minded man will award success to superiority of energies. He does unto his opponent as he would be done by, in offering a free fight in business; he does not want any more in return. He is willing to have practiced on himself that which he elects to use on his opponent, if the latter thinks of it first in the race of skill. He takes no privileges that he is not willing to grant to his opponent. The Golden Rule in business is nothing but an honest measure of skill and energy. It does not compel one to work against his own interest in favor of his opponent; because their business interests are diametrically opposed, and any honest man would prefer that his opponent confer no favors, but let every question stand

on its own merit. Competitors in business expect nothing of each other except honest methods and fair dealings, and favors become embarrassing. The narrow-minded, however, stoop to bickerings, and begin to minimize the good qualities of their opponents, and finally complain that the Golden Rule cannot be practiced in the business world. The man who cannot practice the Golden Rule in business, cannot utilize the spirit of it in the moral sphere, and the man who deals dishonestly will proclaim injustice when he is beaten by the same methods. It is a part of a friend not to tempt another to do wrong. When lax methods are adopted, and advantages allowed to unscrupulous persons, they yield to the temptations to do wrong; whereas, otherwise, they would be compelled to do right. Every honest man expects to do right whether he is bound to do so or not. A binding contract is no obstacle to him. When one borrows money without proper security, he is tempted to evade payment, and his success in avoiding payment will make him resort further to unscrupulous methods to accomplish that end. Every honest man expects a contract to be secure. Laxity of business methods creates more distrust in human nature than any other cause; and it is the duty of every honest man to bind the unscrupulous party to honesty. An honest man recognizes that it is justice for the penalty of the law to be executed; and, even if he is caught in violating the law, his own sense of justice demands that the punishment

shall be inflicted. It becomes a friendly act to send a thief to jail.

Selfishness is an enemy to justice. All recognize that it is an enemy to the family, and the world of society is a composite family. The presence of delinquents makes the existence of law necessary. While the honest man does not need the law, he prefers it for the sake of the unscrupulous. It renders him able to practice the Golden Rule where honor has to contend with dishonor. True love must be intelligent or else it will fail to reach the defective class. The man, who is foolishly good, confirms criminals by offering more temptations, and prevents the defective from becoming self-sustaining, which is the wise aim of all philanthropy. The true love of a friend should not be applied, so as to make him break the Golden Rule. The honest man has no fear of the execution of just laws, and feels it no hardship that such laws exist. It is granted that a dishonest measure may at times win more money; but we have seen that money is not the measure of an honest transaction. Perhaps in the long run, it does redound to the amount of money made by being honest; but it takes a great amount of shrewd trickery to win over certain just business laws. It may be argued that the same amount of shrewdness applied in legitimate channels will ultimately gain as great a financial reward. An honest business man once said that every transaction should be made as though a lawsuit would follow; by so do-

ing, justice can be upheld between the just and the unjust. Such a policy puts burdens on honesty. Such a policy is not necessary between honest men, but one cannot always be sure that honesty assumed is genuine.

One man's success does not depend on another's failure. The ideal transaction consists in giving value received; and, instead of one success, there become two. A kind of commercial cannibalism would soon destroy all the business resources. The relation between capital and labor are the same as those existing between employer and employee. When the employer seeks to get labor for less than it is worth, he will only get an inferior form of labor; and the fixed law of supply and demand will cause skill to gravitate elsewhere. It is a dangerous policy to practice getting a thing for less than it is worth, for we will finally get an inferior quality of goods that are not worth the price given. Regardless of considerations of honesty, the full measure of value received will be an evidence of success in all business concerns that are fixed on a firm basis of success. As in all forms of activity in life, the fittest must survive; and this is based on the principle of honesty in business in furnishing a value for the amount received. The oldest and most substantial businesses have an honesty in dealing as their most valued asset.

CHAPTER III

DEFEAT

Perhaps no one ever would admit that defeat is pleasurable. On the other hand, it is painful. However, it would be admitted that defeat may be profitable. So a paradox arises, that a thing may be pleasurable because of pain. But the question arises: Should a pain be painful when ultimately pleasure will follow? Therefore, this kind of pain, which becomes productive of pleasure, is physiological and, but for the practical experience, should become a misnomer. So the wise would elect to suffer pain for the pleasure that may follow; while the unwilling would have it thrust upon them. Yet the consequences in both instances become more or less wholesome. The question arises again: is pain the antithesis of pleasure? It may be answered that it is not necessarily so; for pain that is inflicted for wise purpose is but another form of pleasure, and it becomes a privilege to bear such a pain. However, few will realize the philosophy of such suffering.

The great and wise, in the history of the human race, have been noted for their ability to suffer defeat for a purpose. In many of these characters, the pain was perhaps inflicted; but in some it

was elected, as in the case of Moses, who elected to suffer the afflictions of his people. The pricking effect of defeat redounds to arouse every dormant energy, which otherwise would not be reached. It might be asked if a wise man could not will to allow defeat that profit may arise; but this voluntary surrender would imply that all his energies were not used. Even when man has done the best he can, he can then be made to do more. We have seen in the case of muscular fatigue that greater powers arise as a result; this is the law of progress and development. In the vegetable and animal kingdoms, some species must die that others may live, not that they have individual rights, but because there are superior purposes that cannot otherwise be accomplished, and in the onward progress of evolution wisdom must rule. In the world of human efforts, petty ambitions must perish, or else wiser purposes will fail; success of the latter directly depends on defeat of the former. Success brings failure; and failure, success; but excessive success and failure are abnormal, and therefore have a depressing effect on ambition. There should be enough failure to prod the ambition and not enough to choke it; just as in the case of inoculation there should be enough bacteria to stimulate and harden the system against disease and not enough to paralyze the vital functions.

Suppose that the gardener's excessive sympathy for plants would not allow him to uproot the weeds from the flower beds, what would be the use of

planting flowers? In the psychic sphere thousands of impulses grow, both wise and unwise, painful as well as pleasant; what would become of man if none of them were weeded out? The fit would perish as well as the unfit, and aimless confusion of impulses would be the result. Only a few are gifted with the wisdom of weeding out these undesirable impulses; in the majority, the process is accomplished by divine influences, which saves primarily an unwilling beneficiary. It may be asked which of the two influences would accomplish the best results,— the one who willingly courts failure and defeat, or the one who rebels at the prospect of defeat and finally accepts the wisdom of such adversity? According to the psychology of such a process, it would seem that the latter would be preferable, because the greater amount of prodding would develop a greater amount of psychic energies; but in this class there is greater necessity for the development of energy. A willing sufferer suffers less than the unwilling; the boy, who resolves to have a boil lanced, endures less pain than the one who requires to be held.

The disciples of Christ were ready to believe all lost when the Savior was crucified; but His wisdom could foresee what the pain He endured meant to humanity. Little did these disciples believe that Christianity would encircle the globe in twenty centuries. Obscurity, unpopularity, ill-health, imprisonment, and the work he loved broken into fragments, were the fate of Paul; but were not

these stepping stones to his greatness? The ability to fail has marked every great character in history, and the records give hundreds of heroes who have failed of their lives for liberty. Socrates esteemed death secondary to the cause of his conscience. While failure may be seen by every one, the revelations that are disclosed may be caught only by a few. Character is wrought by painful struggle and not by easy success.

Failure may cause the discovery to be made that we are not in the right place in the world; it is a beneficent awakening that will prompt us to seek more suitable fields of activity. Such discoveries could not be made without the painful experience of failure. Yet success may be attained, though with greater effort, if the occupation is uncongenial.

Intention may succeed while results will fail and vice versa. Failure within is always a calamity; outside it is a blessing, because it re-acts on that which is within.

An honest purpose with assiduous activity, guided by a clear conscience, never fails; but results may be disappointing. If we were dependent upon outward results, we would all be doomed to heartrending failures; yet a certain amount of outward failure is wholesome, because it makes us go back and revise the code of conscience, which all will agree is often necessary. Conscience is the superior spirit, which guides us by and through the intellect. It may be, however, that a mediocre

intellect will fail in part to accomplish a good design; but the spirit of intention remains constant. In that way some of the best people may act without proper discretion, and be always failing by not comprehending the outlying circumstances. On the other hand, some less conscientious folks may, with greater discretion, succeed in their intentions and outwardly seem to be doing more good. But when we can realize that outward results are no index to the good intentions, we can go on failing without ever becoming discouraged. Ruskin says: "It is better to prefer honorable defeat to mean victory, to lowering the level of our aim, that we may more certainly enjoy the complacency of success."

Plans may fail, but man should never fail; success is defeat, when conscience is violated. The outward success in virtue is measured more by the intelligence through which it travels than by the intention; and, for that reason, shrewd, unscrupulous men may at times appear to be more conscientious than some of the so-called fanatic Christians.

It is indeed fortunate that the rewards of good intentions are lifted out of the realm of human judgments; for otherwise, the promptings of conscience would be prostituted and deformed in order that the world might see our successful plans; and we would attempt to do good in order to appear to be good, and yet be, at heart, a failure. The publican's prayer was outwardly a failure, but inwardly a success; while that of the Pharisee

was the reverse. The publican was strong in that he realized his weakness; the Pharisee was weak in that he assumed the strength of good intentions. For it requires great strength to fail:

> "For thence a paradox
> Which comforts while it mocks
> Shall life succeed in that it seems to fail."

Perhaps a great many of our most successful men in the business world have attributed the beginning of their real success to the painful experience of failure, which seemed to have the effect in removing certain hazards which threaten continued success.

There are causes of failure that would go unheeded but for the painful experience of failure; to these, who do not feel the pain as a necessary result, repeated failures follow. Continued success blinds us to the possibility of failure; and, as a matter of fact, we are not born with sufficient vision to see enemies of continued success. Our memory of the exact location of the furniture in a room occasionally requires to be refreshed by a fall over a chair.

CHAPTER IV

ANXIETY

The uncertainty of the issue of any undertaking is calculated to bring out almost every reserve power; it is one of those painful stimuli that man needs to have. In the case of disease, a modified form of the infection is inoculated to bring out those reserves of vital resistance; but it was noted that an inordinate amount would be destructive, instead of stimulating, in the effect on vitality; and it was seen that the system, without these stimuli, would possess a lower standard of vitality. So it is with painful influences in the psychic realm, where the character must be hardened by painful influences. It is universally agreed that these efforts are not of the pleasant kind; yet too much anxiety, instead of being stimulating, becomes depressing, varying of course as to the type of individuality of character. Equanimity is one of the fruits of normal anxiety and it is acquired, never inherent. So it must result from experience. Worry may be beneficial up to a certain point; but, in excess, it becomes harmful. A daily newspaper has facetiously remarked that we should worry enough to avoid poverty, but not enough to destroy our mental equilibrium.

It is a question of the almshouse on the one hand, and the insane asylum on the other. It would seem that characters are not made ready formed with immunity to worry. While a few worry to the extent of disease, a great majority do not worry enough. In the mad rush for a good, easy time, the masses take no thought of the morrow and rush blindly on to the consequences of indolence and lack of economy, exhausting all their resources, until financial failure is met face to face. When resources have been dissipated, there is nothing else to do but suffer deprivation. Worshiping the cheerful god of optimism has brought disappointment to many, which could have been prevented by a certain amount of worry. It may be noted that men who failed repeatedly in business are often more optimistic in business. They can feel no worry at the possibility of failure in their wildest business ventures. On the other hand, the most successful business men undergo moments of great anxiety at times; but, after continued success, anxiety finally lessens. So a man without experience must suffer more or less anxiety; and he never becomes entirely immune to it. Those men who attain the distinction of being captains of industry may attain such distinction at the expense of health, and undue anxiety plays an important part in producing such disasters; but still it is an important element in winning success, and if the making of money were the highest form of success, such sac-

rifice would be worthy. So we would regard anxiety as being deficient, normal, or excessive; and, obviously, it has a range of wholesome utility.

The father who suffers no anxiety during the process of development as to the future moral and financial success of his son is compounding interest on disappointment, which will accumulate such dividends that they will break the bank of contentment in later life.

Not only is outward success dependent on a certain amount of anxiety, but the inward appreciation of it is altogether measured by the amount of care that has been expended. The expenditure of anxiety for a child increases the natural affection for it. The mother, because of pain and anxiety, loves her children more than the father; and, for that reason, offspring can very rarely inherit greatness from the father. There is a natural law of heredity that the physical characteristics proceed from the father, while the temperamental qualities are inherited from the mother. So a successful son would inherit health from his father and character from his mother. This fact may be due, however, more to anxiety and care on the part of the mother than to any other cause.

Perhaps no class of young men undergo as great anxiety as to the future success as professional men; for in these the data for predicating success are not visible, and are dependent on many contingencies. Exceptionally, however, the son may inherit the father's professional fame and

make good a success that has befallen him. But this is an exception, because professional attainments won without individual effort soon become undermined in the world of competition. For, because of a psychological reason, man cannot learn to safeguard the interests of his success except by a certain amount of anxious attention. Under present laws of human nature, the psychology of success must take into account the painful influence of anxiety; but it is granted that, exceptionally, success can come without anxiety. Certainly, however, inward appreciation of it must depend on the care that has been expended. The uninterrupted course of health would be taken as a matter of course, but the advent of an acute illness would have the effect of exciting greater care in circumspection of the hygienic laws. The facts of life do not adjust themselves to the laws of human comfort; but, on the other hand, man must adjust himself to his environment; and, as a result of the lack of proper wisdom and foresight, in the absence of experience, anxiety must be expended. The greatest characters in history have been of the anxious kind. In the face of adverse results we compel anxiety when a retrospect discloses the fact that individual efforts properly applied would have prevented such adversities. So anxiety should relate more to the preventable, for self-censure is one of the results of not expending a sufficient anxiety and we cannot separate great efforts from solicitous care, with due amount of

forethought and preparation. The occurrence of uncontrollable events like fires, storms, panics, etc., should excite no anxiety, because these are beyond the realm of individual control. So anxiety that promotes forethought and prudence is wholesome.

CHAPTER V

FEAR

Perhaps a majority would urge the doctrine of fearlessness as a course of superior strength, but the query arises would it not be wiser to cultivate an intelligent fear. Fearlessness is often a result of ignorance, and it can readily be seen that much suffering among the masses could be avoided by a more careful study of certain tendencies. The fearlessness of obstacles in business often brings about bankruptcy, while an uncomfortable fear wisely directed would have prevented such disaster. Were the masses better taught how to fear there would be less poverty and more happiness, for the usual mistakes are not those of indifference but positive violation of prevailing judgments.

Locke defines thus: "Fear is an uneasiness of the mind upon the thought of future evil likely to befall us." Paul advises (Rom. 13:7) that we should render fear unto whom fear is due — implying that certain things should be religiously feared. The ignorant and careless are usually unafraid. So there are needless fears and intelligent fears, and it behooves us to differentiate the two classes.

It requires an amount of heroism to be afraid of the vanities of the world, yet some are so gifted as to become the lights of the world. The great character of Moses the law giver is handed down to us because he was afraid of the luxuries of Pharaoh's court. We never get beyond a childhood in suffering needless alarm and at the same time allowing grave dangers to creep upon us unsuspectingly. The bugaboo in the dark makes the child's hair rise on end, while the firecracker, with its deadly germs of lock-jaw, becomes wildly fascinating. The common fear of being run over by a street car or automobile does not compare with the uncommon danger of a bear or a lion. We wonder why the child does not fear that which is most dangerous; then to be afraid will be a valuable sort of pain. The fear of the Lord is the beginning of wisdom, and the fear of violating any truth is also wise; and the unwisdom of absolute comfort, contentment and satiety is apparent. While Noah was moved with fear the flood carried off victims that were enjoying the best that the world afforded, and the same happens in many disasters. The ability to be afraid marks every great character when discretion becomes the better part of valor.

The painfulness of fear has its influence in bestirring us to avoid certain evil consequences. Perhaps no moral fact has been so well established as the danger of wrongdoing, and any one who

perverts this teaching must suffer the consequences. Every intelligent fear may serve its purpose and be banished, but the fear of wrongdoing can never be escaped for the danger is ever present. There are many dilemmas in the world where the fear of wrongdoing is banished for greed or gain in otherwise good men; and if this fear were kept alive, consciences would not become debased in prostituting certain moral laws. For this reason corporations are said to have no consciences because the representative officers do not fear wrongdoing as officials by disclaiming individual responsibility. Some escape this fear by purblinding the conscience.

It requires courage to fear certain pleasures and frivolities, and it cannot be done without a certain amount of forethought. It requires strength to hesitate while the masses rush blindly on in their enjoyments which crowd out many valuable lessons that could otherwise have been learned.

Enough fear has an immunizing effect, while an abnormal amount poisons the system.

More fear on the part of the captain would have prevented the sinking of the great steamer, the *Titanic*, off the coast of New Foundland. This vessel was believed to be unsinkable, but over a thousand souls were precipitated into eternity because certain precautions were lacking. It is needless to say that fear will save thousands of

lives in the future by the provision of life-saving measures.

The fear of death has a function to perform, and in animal life it helps to preserve the species, but it proceeds without intelligence. Instinctive as it is, this fear of danger is one of the primal laws of animal life, and man does not escape the same feeling.

The fear of death in man is one that stimulates preparedness, while those who have acquired sufficient spiritual education may be said to have little or no fear. The fear of the uncertainty that may follow death does not altogether make the skeptic feel secure, and would have the effect of dissatisfaction with self and would tend to make the infidel revise his philosophy. From his standpoint the Christian has all to gain and nothing to lose. Unquestionably this fear has a stimulating effect on all classes; and well that it should, for when death becomes a fact the opportunity for preparation is lost.

The importance of the subject cannot be dismissed by idle speculation and exaggerating the necessity of safeguarding health measures, but it behooves us to set about to learn all that is available. However revolting against our sentimental natures it may be, who can say that hell and damnation is not a fact, and what authority can be quoted that it is needless to fear the hereafter? Granting the truth of the story of Dives, why should such an honest and respectable man have

feared? Were his comfort and luxury wise? From any standpoint, philosophy must apprehend the probability of this record of history; and perhaps any one should fear death more than Dives did.

CHAPTER VI

MISFORTUNES

We have observed that certain painful influences are set up in human endeavor, which are more or less amenable to the will power. But there are other obstacles to be encountered that require to be overcome, which are entirely beyond the control of man. Misfortunes are a fact; and they come not as a reproach to our integrity of effort, but as obstacles to stimulate greater activity. The possibility of misfortune promotes the building of safeguards; and, in his calculations, man must reckon with the uncontrollable obstacles to human endeavor. Every machine must be built with a reserve power, because its ordinary functions may thus be more easily performed. An engine to do normal work of twenty horse power should have a capacity of thirty horse power, because there are certain exigencies to meet that may require this reserve force. So man must have a reserve power of energy and philosophy to meet certain emergencies that are beyond his will power to prevent. If this power is absent the obstacles, in the form of misfortunes, will show up to develop the latent reserve, which, if not

brought out, will bring disaster in the realm of individuality.

It will hardly be questioned but that many failures in the business world from panics and other unforeseen disasters have had the effect to put business firms on a more substantial basis; and these effects cause other safeguards to be thrown out. Every railroad wreck stimulates to a greater amount of precaution and will make travel safer; without a disaster occasionally, measures of prevention become more lax.

The cost of fire insurance is a tax imposed for the purpose of being able to sustain the loss of home or business by burning. Yet if no fires were ever to occur, these precautionary means would cease.

So man in the psychic realm must take into account the possibility of a misfortune, and his energies require to be whetted occasionally by some disaster. Theoretically he should not have the necessity for such disaster, but from a practical standpoint his indifference requires it.

The painful birthright of poverty has been the means of making the most heroic characters in history. Many men of great attainments wisely attribute their strength to poverty in youth, which developed power, which otherwise would have lain dormant. Deformity perhaps had as great a share in the development of philosophy in Pope as blindness had in the enlargement of Milton's mental vision. Of course a great majority suc-

cumbs to the depressing influence of adversity; while a few are aroused into the activity of greatness, which would not otherwise have been developed. The few who rise to greatness through adversity show the survival of the fittest, who are to be recorded in history for the guidance of posterity; while the unfit perish in oblivion, leaving the world no better, and oftentimes worse, for failing to make use of the opportunities furnished. The pre-historic mammals, because of their overgrown size, from living at ease in the paradise of foods that could be acquired without effort, became unfit and therefore extinct; while those that could survive the adversity of animal warfare propagated their species. The same is true of the savage, who now has to fight the misfortunes of vulnerability to infectious disease, and is fast retreating before the ranks of the civilized man, who has well-nigh won the fight against bacteria. Before many centuries the civilized man's posterity will populate the whole earth.

The joys of Christianity have been bequeathed to us through the misfortunes that brought death to Christ and his apostles. The willingness of some early Christians to be burned with pitch, as torchlights for Nero's garden parties, proved and emphasized the faith in human conduct. The willingness of Socrates, in his unfortunate predicament, to drink the fatal hemlock proved the genuineness of his philosophy. What his friends esteemed a pain, Socrates accepted as a privilege,

viz: to die as criminal in obedience to the dictates of his conscience. This tragic death was not the beginning, but the culmination, of his heroic career, and previous misfortunes had schooled him to be prepared for the final tragedy.

Man in relation to his sphere of psychological activities is beset with preconceived opinions and prejudices; and, for that reason, environments cloud his vision. His judgment, under such circumstances, seems correct; and he can never gain an enlarged vision until some havoc completely upsets all these conclusions and makes him see questions in an entirely different light. Often times a better expression of a book can be made by throwing away the old MSS. entirely; because, as long as one attempts to retain the satisfactory parts, the unsatisfactory parts unconsciously cling to the manuscripts. In solving a difficult mathematical problem, it is often better to rub out all the calculations and start afresh, because it becomes necessary to change entirely the viewpoint, and any attempt to supplement the original calculation will bring up the same obstacles that were present. So to get rid of the encumbrances, we must start anew. A man may run a successful business in an old building, partly unsuited to its purpose; yet he can never see it to his interest to tear down the buildings for new ones. But the disaster of fire may come along, even without insurance, and he becomes rid of certain narrow views that he could not previously escape, and he

then inaugurates a policy that will bring greater success to his enterprise.

Man's affections for his narrow environment cannot be detached except by a terrific force of circumstances, such as are brought about by misfortune. Dr. Marion Sims, one of the pioneers of modern surgery in America, in "The Story of My Life," says that his two first patients, children, died; while the third, a man who should have died, recovered from delirium tremens. Such misfortunes determined him to move from the small town of Lancaster, S. C., to Alabama; and further disappointment impelled him to move to New York, where he established the Woman's Hospital, the first of its name in the world. In the presence of misfortunes, new sources of wisdom are traced that have escaped cognizance. Man becomes enamored of his environments, as a youth does of his first sweetheart, with all the pious devotion of his young manhood. It would be utterly useless to attempt to persuade him of his unwisdom, and nothing short of some misfortune will produce an awakening, finally, that it was not for the best. His first feeling was rebellion in the disappointment of his most sacred hopes; but later passion and prejudice are followed by a wise deliberation, and he is led to realize how wisely it all happened. Perhaps corporal punishment cannot be received by the boy in any other way than as a misfortune to childhood, and few children can ever

be made to think such an infliction was just; but later in life the clear vision of it is discerned.

Each stage of life is a childhood to the succeeding stages, and misfortunes cannot, for the time being, be construed as anything but cruel; but even in rebellion, a wise philosophy takes root and matures later on. For that reason, the veteran learns the value of his hardships, and with many the lesson can be learned only through experience.

PART III

CHAPTER I

BODY, MIND, AND SOUL

Man is a being endowed with physical, intellectual, and moral functions, which are governed by an individual influence called the Ego; or, in other words, he is composed of body, mind, and soul. The inter-relations of the influences of each class of functions is, obviously, complex; and it is difficult to determine where one ceases and another begins; but these general classifications are accepted more often than any other scheme for the study of human nature. While a great number of the physical functions are directed by the influence of the will, a greater number of the more complex processes of organic life are involuntary, such as breathing, heart action, digestion, process of nutrition, etc.; but these are not entirely beyond the influence of the will and are affected in an indirect way by voluntary effort. A strange fact is exhibited by the use of anesthetics, such as ether, chloroform, etc., which suspend by a benumbing effect every process of consciousness; at the same time, it shows very little influence on the organic functions of life. In fact, ether stimulates the heart for a time, and unconsciousness to pain may be prolonged with safety to as much as two to five

hours. These agents entirely separate the physical from the mental functions and the dividing line appears very distinct; yet the influence of each under normal conditions overlaps. While the Ego is absent permanent damage may be done by bodily injury during anesthesia, and the Ego returns to take cognizance of any injury sustained, and suffers thereby. Under the influence of anesthetics the mind and body soar in their respective activities in widely separate spheres. Dreams may be pleasurable, or they may be horrifying, and frequently memory records nothing at all. There is no record of time kept, and hours after the anesthetic has been stopped the patient may ask why the operation has not been begun. Exceptionally the effect of ether is pleasant and intoxicating, but usually it is attended by a feeling of suffocation. Fright beforehand seems to exaggerate the disagreeable effects of ether, and recovery is much like that from alcoholic intoxication.

While sound minds and healthy bodies have their reciprocal effects, there are many exceptions. A confirmed lunatic may present a body healthy to every known test; and, on the other hand, a hopelessly diseased body may contain an intellect of rare brilliancy. A postmortem examination of Beethoven showed this to be true. Most usually, however, disease of the body brings about more or less disturbance of the mental equilibrium. Mental anguish will, sooner or later, set up diseased processes. Mental disturbances bring about func-

tional disorders, which sooner or later become organic. In the readjustment of these disturbed conditions, it becomes necessary to retrace the steps of causes that brought about the troubles. For instance, if indigestion has been brought about by mental worry and improper eating, it becomes necessary to administer remedies to relieve the actual disturbance, and then set about to maintain a cheerful frame of mind and an intelligent care of diet. It is idle to say that mental suggestion or medicine is useless; for both are valuable. The cheerfulness of the family physician may be the most valuable asset in the successful management of a disease. Yet this fact may escape cognizance of both physician and patient. This influence enhances the effect of the medicine given, that would not otherwise be observed. His therapeutic skill depends for its efficiency on the intimate and reciprocal relations that exist between the mind and body.

A functional disease becomes, sooner or later, to a certain extent, organic; and an organic disorder ultimately becomes more or less functional. Mental suggestion, as practiced by the Christian Science cure will alleviate a disorder that is predominatingly mental or imaginary; but it will not remove an organic disease such as tumor, cancer, etc. So it becomes unnatural to treat a tumor or a wasted lung by faith cure, or to relieve an imaginary pain with a dose of medicine. Yet drugs may be used as a means of mental suggestion. An

imaginary pain is no less a pain because it is imaginary. In fact, a psychic pain is the most intolerable of all types of suffering. These co-relations of mind and body are discussed for the reason that we wish to show how even physical pain, at times, may have a wholesome influence towards the betterment of the mind, and later to the moral nature. As has been before mentioned, we must not lose sight of the fact that all pain is not pathological, but may be wholesome or physiological, though the limits require to be carefully drawn. We all recognize that man has an intellectual as well as moral nature. Some would have it that the moral nature is the evolutionary product of intellectual activities; but that does not stand the test of observed facts, for there is no causative relation between the two. Some weak-minded individuals have well-developed moral natures, and *vice versa.* Two of the brightest intellects I know are charged with untruthfulness by their most intimate friends. While ignorance is the rule among criminals, keen intellects are often convicted of stealing, murder, etc. One of the best Bible scholars I ever knew was believed by many to have an unusually mean disposition, and he would get drunk. When a man with a sound intellect commits crime, we question his ability to comprehend certain moral truths which are universally recognized. It is a reflection on his capacity to be unable to see the finale of his conduct. We would expect him to appreciate the value and pleasure of a good conscience;

but, as a matter of fact, he does not. So conscience must exist independently. On the other hand, some of the best trained consciences may be found among the very meager intellects. I knew an ordinary laborer who possessed as fine a moral nature as I ever saw. He could neither read nor write, but his moral distinctions were unusually clean cut. The apostles, Peter and John, in the New Testament were "ignorant and unlearned," and were probably unknown to the intellectual class of that period.

That conscience governs is universally recognized, and when right or wrong is to be determined the intellect is made to subserve a superior influence. There must be some influence beyond the intellect, which is the servant and not the means necessary to conscience. Conscience is the spirit of man, discerning right and wrong through the intellect. It is susceptible to a high degree of cultivation, and finally displays a religious nature, which is that function of the soul which seeks to worship God. The religious nature is a more advanced stage of morality. Morality is a function of the soul that worships the divine part of man, and religion is a further development of the same, that worships God. The moral man is but an imperfectly developed religious man. So morality differs from religion in degree only.

Intellectual study of religion is by no means synonymous with religious experience; such a study hardly differs materially from any other

study. Yet after religious experience, an intellectual study becomes more comprehensible. It would seem that some attempt has been made to gain more Christian experience through philosophy and science; but that is obviously irrational, because the one occupies a distinct realm from the other; and when the two are confounded, the student may become lost in speculation, resulting in skepticism and agnosticism. After religious experience, the Christian may be able to explain it by his philosophy. The science of psychology can explain nothing to one who has never been conscious of the process in question; and one who claims an experience foreign to another's knowledge cannot convince the latter of his thoughts, and the latter would become a skeptic. So we are compelled to recognize the identity of conscience as contradistinguished from intellect.

We discern striking identities of the body, mind, and soul in man; in these, there are intimate correlations. Pain may be limited to one sphere, but it usually spreads more or less discomfort throughout all. The most heroic battles between bacteria and the elements of vitality scarcely reach the consciousness of man, and may be evidenced by only a vague sort of discomfort. The consciousness of the presence of such active and dangerous diseases as typhoid, tuberculosis, etc., by no means conveys the gravity of such disorders; but usually the pain is marked to such an extent

that the intellect is driven to the necessity of eradicating the cause and still further searching for a means of prevention. An occasional attack of sickness stimulates greater prudence, and those who are never ill are not any more likely to reach old age than those who have been impelled to study the laws of hygiene. The influence of suffering travels upward to the intellectual and spiritual natures, and has a certain effect in the adjustment of the various activities. An occasional financial loss in business perfects a better system of management; for it belongs to one of the weaknesses of human nature to become lax and indifferent. If human nature had not this weakness, the necessity for the uncomfortable occasionally would be removed. As long as man has to suffer from disease, pain and disappointment, he needs to study to obtain knowledge of hygiene, philosophy, and religion. His environments are such that, without due regard, he will become ill; and, without the possibility of failure in life, he would cease development; and, without the fact of his depravity, he would not seek after higher attainments in the moral sphere. Vulnerability to disease, mental incapacity, and moral depravity are our stock in trade for a start in life, and perhaps many would never have their stock improved but from the suffering from such defects. The fact of infirmity, existence of need, and the widespread prevalence of imperfection implies that man must suffer and

that his pain may be a means of extricating himself from these fateful environments. The degree of suffering will be evidence of the extent of his ignorance until he has achieved emancipation.

CHAPTER II

ABSENCE OF PAIN

Man is impelled by two motives in his psychic actions: the avoidance of pain and the pursuit of pleasure. Strangely enough, these motives are oftentimes confounded, and a curious paradox arises when we may really obtain that which we are trying to avoid. A chase of pleasure is often rounded up with regret and disappointment; and the effort to get rid of unavoidable pain is followed by joy and comfort. The entire absence of pain would defeat perhaps the greatest source of joy. When the pursuit of pleasure proves disappointing the wise ponder; and the disappointment achieves an awakening that otherwise could not be accomplished. Blindly worshipping the god of pleasure will surely bring pain; and this may be a means of undoing ignorance, that otherwise could not be accomplished. The question arises: is it not wisely chosen? The prodigal son was a better man as an indirect result of his prodigality; perhaps better than the older brother, except for the scars of disease — for nature is not a god of mercy and is inexorable in her penalties. Good men of noble impulses have been led to ap-

preciate the sanctity of chastity to a greater extent after seasons of dissipation; but, in the meanwhile, nature has wreaked her vengeance. This seems to be a process of prodding the moral vitality, analogous to the process, previously referred to, of creating immunity to disease by artificial inoculation. It was then observed that the process was guarded by a certain circumspection; for a fatal infection could easily happen. The same is true in the moral sphere; for dissipation can be carried to a degree that would be fatal to moral vitality. So granting that a checkered course of dissipation can result in good, the first reactive influence is pain. In the case of the prodigal son, hunger was the first pain that set up a wise retrospection. Many others under the same circumstances would have suffered the same without comprehending its significance and would have rushed madly on to destruction. The greatest characters of history have not been marked by sinlessness, for many have been guilty of the grossest crimes, but these crimes have been sorely repented and they served as stimuli to greater and compensating attainments. The contrition wrought by David's sins inspired the beautiful verse in the Book of Psalms. The sin of Moses was a stimulant to his greatness, and Paul's untiring devotion was constantly prodded by his realization of having persecuted the Christ.

It was not their sins that made those characters great, but it was the manner of repentance.

Their reserve moral strength was prodded to greater strength by wrongdoing. The essential standards of goodness in man are uniform; but the ways of obtaining goodness vary according to environments. Two men may be equally good, although one may be sent forth the son of a minister and the other the son of a drunkard. The latter succumbs to the temptations of his environments; but he promptly repents, and was none the less good for his wrongdoing. If a child could continue to live in an absolutely pure and moral atmosphere, innocence could carry him safely through the world; but, as a matter of fact, the world is full of sin, and the child's innocence must be broken that he may learn how to grapple with the various pitfalls of life. Man must learn how to live in the world and keep himself spotless.

The first offense against conscience is more painful than any subsequent transgression. If this pain is wisely heeded, more circumspection is stimulated; but continued violations finally make dumb the voice of conscience.

If man elects to look upon pain as nothing but pain, he becomes a pessimist; but, if pain leads to a betterment of human conduct, there appears an optimistic view of suffering. We have to conform philosophy to facts and not attempt to shape the laws of human nature to philosophy.

There are troublesome stages of life that require to be conquered by trouble; fire must be fought with fire. A pleasant vacation from these

troubles does not dissolve them. A man cannot escape financial reverses by going to the expense of a trip abroad for a diversion. Domestic unhappiness cannot be cured by resorting to the vanities of the social world. Many seek to cure incompatibility of temperament by cultivating new alliances; but does it cure? The divorce courts answer, "No." A real thorn in the flesh requires a real surgical ordeal for its eradication. There is a fable somewhere recorded that a priest kept a walled convent, where he received newly wedded couples. The honeymoon was spent in this prison where every uncongeniality was fought out, and the couple was not allowed liberty until every difference was settled. When this struggle was ended, a peaceful life was promised. Serious troubles compel man to dig for philosophy and religion; and, unless labor is expended, he will become overwhelmed. For the time being this cure is more disagreeable than the trouble to be eradicated. Restless attempts at enjoying social vanities should be curbed by more serious thought; and a forcible concentration on studying the rich truths in the Bible produces a wonderful awakening. After conquering such restlessness, ephemeral pleasures afford greater enjoyment. Vanities, like alcohol in the habitués, can never satisfy the craving; the more they are drunk, the greater the craving; and from a parched stomach the appetite is never satiated. When the right hand offends, it is easier to allow a repetition of offenses

than it is to cut it off, and cutting out a cancer is more painful than allowing it to remain for a time.

Scientists are led to believe that the painful warfare among the various species of animal life is cruel in the evolution of the survival of the fittest; but the inexorable law for the betterment of the race must be enforced. This is no less cruel than the struggle that must ensue in the world of man's psychic activities. Some desires must unwillingly perish, that superior aims may be accomplished; and disappointment must follow, that things may be seen in their true perspective. At times physical pain becomes much preferable to the experience of some sore defeat. Yet amid all of this turmoil man, though an unwilling student, learns his lessons well in the school of experience; great characters in history are in evidence of this truth. The wiser aims in life lie hidden among the heaps of suffering and disappointment. In accordance with the laws of our making, we oftentimes cannot attain the genuine joy of spiritual peace without a certain amount of the uncomfortable. Of course it is not argued that all joy must travel by the disagreeable route; for happiness is curiously compounded with a variety of ingredients. Pain plays a greater part in the attainment of any kind of success than the agreeable. However, there may be a parasitic form of success in that one man's achievement is obtained through some one else's sacrifice or pain; or else another form of success may be secured at the ex-

pense of the suffering of some subsequent toiler. Any desirable attainment must be drawn by a chain of links of cause and effect, and in this drama of events the rôles may be played by several characters. How many inventive geniuses have died in poverty and ignominy while the fire and destruction left the gold of genius shining in its ashes! The price of greatness is pain and self-sacrifice, and he who is great must tread the wine press alone. The fact of a man giving his life to the fruits of his genius stresses the merit of greatness. Carroll and Reed were martyrs to science in allowing themselves to be bitten by infected mosquitoes to prove the cause of yellow fever; their sacrifice has made the construction of the Panama Canal possible. They could not live to enjoy their fame. The man who invented the gasolene engine did not live to reap the fruits of the automobile industry. Crawford Long died before realizing his great gift to suffering humanity in proving that surgical operations could be made painless by the use of ether. Much that we enjoy has proceeded from the sacrifice of others, and we are parasites in the enjoyment that has flowed from the sweat and blood in Gethsemane.

CHAPTER III

PAIN IN RELIGION

Perhaps no form of religion ever existed that did not carry some sort of teaching of self-sacrifice, and among some heathen religions physical pain was inflicted as a form of sacrifice. Among the very ignorant, the psychic sensibilities are undeveloped and consequently they resort to physical forms of sacrifice; but among the more highly educated class, with acute moral sensibility, man cannot escape the liability to suffering, and because of these inherent laws of his making, the philosophy of pain attains preëminence in affairs of human endeavor.

It may be asked: why does man pray? It may be answered that it is because of his desire to escape suffering, or to acquire happiness. Both incentives are legitimate and wise, and have their appropriate spheres of usefulness. Without the presence of pain the function of prayer would remain undeveloped to a great extent, and all history of human nature corroborates the truth of the wholesomeness of prayer. The necessity of a being infinitely superior to the powers of man is implied: this is God. In all history of the human race man has implored the Infinite for help, and

he who denies the fact that man is helpless is purblind. Perhaps this helplessness is discovered too late in one who never feels it, and he who feels this necessity early is safely on the road to wisdom and happiness. The advent of suffering stimulates inquiry for the direction to this royal road, and here pain comes in as a guiding angel.

It is obviously futile for man to pray to something he does not believe in, and faith becomes a *sine qua non* for effectual prayer. Not all suffering drives man to prayer; but, perhaps in a majority of instances, he may be driven into rebellion. Each effect will ensue according to the presence or absence of a certain amount of wisdom. It is not argued that undue suffering can be made wholesome to the mean and ignorant class.

Prayer for the relief of suffering strengthens the fortitude for the endurance of pain; and, with hope and faith, tribulations may be accepted as joyous, paradoxical as it may seem. The effect of prayer is both reflex and direct: reflex, in that a man is the better because of his efforts to pray; and direct, because there is a God, unmistakable to his worshipers, who always is full of mercy and free to grant what is for the best. A firm trust in God derives comfort whether the thing asked for be declined or granted. That faith in the best that is done is independent of the personal desires of the individual. So nothing can thwart the reflex effect of prayer rendered in the right spirit, even if a prayer be unanswered as prayed.

Pain experienced by a Christian is believed to be at least not harmful but more often productive of good ultimately; that is, if it proceeds from causes external to self. Whether philosophically considered, or tolerated as unavoidable, pain may be productive of good; but it is natural to suppose that more good would arise where there is an element of faith in the acceptance of suffering. The Stoic accepts his pain as one of the cruel fates of existence, and may pride himself in his powers of endurance, as a means of reproach to the laws of the universe of man. So prayer and faith lessens the load of pain and "bring joy in the morn," an achievement that the Stoic can never aspire to.

CHAPTER IV

THE "ROD"

We are often inclined to believe that the pains and disappointments of childhood are less intense, because they are transient; but these acute agonies among sensitive natures perhaps cause a greater degree of suffering than can be experienced in later life. Of course, joys are for the same reason more joyous. It was a vagary of the poet's imagination when it was written "make me a child again just for tonight." A broken toy brings forth tears, but a reaction sets in when some more lasting form of amusement is sought. So far as pain and pleasure are concerned, life runs a zigzag line; but as maturity and old age are approached this line becomes less broken.

The Hindu philosophy, which teaches that pain is illusion when really pleasure is behind it, is to a certain extent a wise discernment of the inherent laws of human nature; for philosophy must conform to facts and not *vice versa*.

The "rod" is symbolic of law, the reasons for which cannot be argued. It is difficult enough to be able properly to read the meaning of law, but it is beyond the comprehension of man to ascertain

why laws should be as they are. It is futile to attempt to explain why a red color of the rainbow gives three hundred and ninety-three trillion vibrations of ether per second, while violet gives seven hundred and fifty-six trillion; or why the intensity of light varies in inverse ratio to the square of the distance.

So philosophy and religion enable us to read carefully the laws of existence, but further inquiry into the causes of these laws is idle and fades into the horizon of infinity.

The "rod" is as much a fact to childhood as grief and disappointment are to the age of maturity; but a peculiar fact is observed that these types of pain assume a different hue after they have been passed up to experience. As pain disappears in the memory, the word pleasure rises into preëminence. It is not for us to say that the Creator should have made our lives suited to a straight, rather than to a zigzag, line. While individuals vary, children must be required to suffer discipline in some way or other. It may become necessary for the "rod" to be brought into play; for, otherwise, reason cannot be reached. Impetuosity cannot be checked except by punishment at times; and when this passes off, an opportunity arises for planting the seeds of reason. It is useless to attempt to reason during a stage of furor; but after a stage of humiliation, moral suasion may become of avail. We would not stop to inquire of the child if he believed a flogging would

do him good, but that has to be trusted to remote results. All that can be referred to him is that it is in conformity to parental law. It requires years for the child to become convinced of the wisdom of punishment; but if it can subsequently be discerned that a parental love prompted it, the effect becomes wholesome. Many a mother has succumbed to tears of joy at the sweet disposition which follows as a reaction from the infliction of needed punishment of a child. The mother would infinitely rather receive the blows herself, if the same good could be accomplished. May not the divine Parent feel towards us the same way when we suffer needed punishment? We are constructed so as to need punishment when certain laws have been transgressed; and to change the philosophy of pain would require a readjustment of the laws of the human universe. It, therefore, becomes idle speculation to argue a change of the first principles of law, which Plato says are eternal.

The " rod " may inflict more pain on one than on another, and occasionally a temperament may be encountered when punishment will be accepted with stoic indifference and insolence. Such instances go to make up a class of criminals that cannot be reached by reformatory methods. But as the degree of suffering increases, the good effect of punishment is enhanced.

How important it becomes to learn the lesson

of obedience to law in childhood! For law compels obedience in later life.

Adolescence is but another stage of childhood in the course of experience, and the rod of grief and disappointment falls unexpectedly. As we have seen that stoic indifference cannot redound to our good, it becomes philosophy to endure the suffering, believing that it is for the best as ordained by a wise Ruler of the universe. A finely educated, spiritual nature will never cease to suffer; but the joys more and more preponderate. While it is true that experience brings forth powers of endurance, at the same time if man ever loses his capacity to suffer, he will lose the privilege of the higher joys. While the same things do not later provoke suffering, yet cultured spiritual natures become sensitive to other influences. A mature man would still suffer from corporal punishment, although incomparably less than a child; but his sensibilities along other lines become more sharpened. Grief and wrongdoing would hardly afflict the child whose parents stand guardian for the laws of the spiritual universe. As spiritual natures advance in culture, they take on different kinds of suffering and greater joys. At first, suffering proceeds from within the orb of self; but later it ceases, and the Christians assume the burdens of others, which can never be escaped. Christ was never insensible to his crown of thorns and he never desired an escape from the burden of

suffering humanity. Did he not confirm and exemplify obedience to the highest law of man's nature in attaining rest in suffering, and not rest from suffering?

The onward progress of the soul is won by a conformity to the physiological laws of the spiritual nature, and the necessity to suffer and a capacity to endure pain is one of these laws, which cannot be set aside by sophistry.

No form of religion can administer to the needs of human nature without conforming to these physiological laws. Human nature is more improved by an inferior form of religion than by no religion at all; because the religious nature is inherent as much as conscience is. The Buddhist religion teaches that an eternal rest, Nirvana, follows death; but this was revised by its teachers because it did not accomplish the highest aims. The spirit preferred to remain in touch with suffering humanity in the hope that some succor could be rendered. One of the idols of the Chinese is pictured as having a thousand hands to alleviate human suffering.

CHAPTER V

ALTRUISM

The spirit of altruism belongs entirely to man and nothing analogous to it can be found in the animal kingdom. Unselfishness cannot be explained more than by saying it is one of those moral functions that derives reactive pleasure by administering to the needs of others. As before remarked, the moral man is but an imperfectly developed religious man; and for that reason, religion cannot exist without morality, which is only a primary stage. Altruism is only a religion of man that worships the divine part of humanity at large. It might be asked why one should be made his brother's keeper! Because man, by so doing, serves the motives of his instinctive moral nature, and the reactionary benefit to his stores of higher pleasure is enhanced. Every intelligent man is guided consciously or unconsciously by some motive; and, were this not true, there would be utter confusion not only in the moral sphere but every other realm of activity. To say that man is selfish in being unselfish is essentially true; but this is a form of selfishness that is legitimate. A man who relieves a helpless case of suffering does so in obedience to his higher impulses; and this is love

of the good of a fellow-man. If he obeys this impulse by worshiping the relief of the sufferer, he can assume that he himself will be the better off. But the good of the fellow-man comes first; then selfish pleasures follow consciously or unconsciously. Such motives are wise because they stimulate greater effort. But the one who performs the same act of charity indifferently does so in response to his altruistic spirit, but his activity will be less marked. It is a question of doing a duty [1] with or without counting the reasons for it.

It goes without saying that acts of unselfishness are *per se* uncomfortable and at times painful, and the amount of sacrifice expended should be a measure of the reactionary benefit, regardless of the good done to the beneficiary. The poor man's penny means as much sacrifice as the capitalist's dollar, and acts of charity must be measured by the amount of self-denial and love. If one had nothing but great love to offer, his act would be as large as any other. The greatest act of charity in history was the offering of the widow's mite.

[1] In analyzing the summum bonum of life from the standpoint of psychology Prof. Wm. James said it was beyond science. He says: "You divine in the world about you matter for a little more humility on your part, and tolerance, reverence and love for others; and you gain a certain inner joyfulness at the increased importance of our common life. Such joyfulness is a religious inspiration and an element of spiritual health and worth more than large amounts of that sort of technical and accurate information which we professors are supposed to be able to impart."

If she had no mite at all, with the same love, the offering would still be as great. And may it not be true that the greatest acts of love are not accompanied by material gifts? Money may confer advantages on the beneficiaries, yet no good may redound to the giver. The man with the burden of his millions, after having exhausted all his resources to enjoy his wealth, finally perceives the vanity of pleasures and decides to donate a part of his wealth to charity; but will not his happiness be determined by the degree of love expended in the cause? Money is not the power but the agent of charity. The poor man who burns with love of the good of his fellowman, is the greatest exponent of charity and becomes a capitalist in the world of spiritual stores.

The one who loves because of good to humanity, can partake equally with all the benefactors who have material wealth. From a selfish point of view, man can only hope for good to himself from the amount of love and self-denial incurred. Love always carries a willingness of self-denial by which it may be measured. Christ denied himself everything for the sake of the world. The truest and best things are always given and never are bought. The most valued friendships are those which we acquire free-handed, and which we have never sought to win by conferring some favor. The prized love and devotion of a true woman are not won by extravagant gifts. The salvation of the soul is a free gift of divine mercy. We too

frequently attempt to buy true friendship, and even salvation, by our money, by our religious works, and even by our prayers. All we can do is to prepare ourselves for receptivity by self-denial.

As acts of charity confer good upon the agent as well as the beneficiary, so wrongdoing harms self and robs others. If I am selfish, I take that which some one else ought to have; and every one's luxury means that some one's need goes unsupplied. In this sense, self-pleasure is robbery and cruelty. Such truths, which are seemingly paradoxical, can better be apprehended in the abstract than by their application to self, but the facts remain. Truths are never paradoxical; but they appear so at times, because our eyes are afflicted with astigmatism and the same object may seem double. We need lenses of wisdom to enable us to focus properly. "He that findeth his life shall lose it: and he that loseth his life for my sake shall find it." Christ, though rich, became poor that we through his poverty might become rich. From our viewpoint it would seem a great deprivation for Christ to suffer poverty for us; but his burning love for humanity made him esteem it a pleasure, and life to him would have been a failure had he not suffered for a lost world. So our ideas of suffering for others need revision, and the word "suffering" becomes a misnomer. Does a mother finally esteem labor and anxiety to have been painful, when a virtuous son goes forth into the world?

Our vocabulary must be made to conform to the end of things and not to the means by which such ends were obtained. Labor should not be irksome that accomplishes our aims. Pains that bring joy are not pains but pleasures, and duties of love never grow tiresome. The laws of the altruistic nature of man command vicarious suffering and the whole human family is indissolubly bound by a bond of sympathy. Never in the history of the world has human sympathy been more active than now, and the millions donated to charitable purpose almost double each year. Men of money are more than ever beginning to realize that their wealth is a trust that can best be discharged by giving to the needy. The masses now have greater opportunities and advantages than the wealthy class had a century ago, and it would seem that a great class of men is just now beginning to awaken to a sense of moral obligation.

The world of society is full of vicarious suffering. The strong are made to support the weak, and the pauper class furnishes an opportunity for the rich to do charity. There can be no benefactor without a beneficiary; and to keep alive these moral duties, these two classes should exist.

Law abiding citizens must be taxed to restrain and care for the criminal. Poverty will continue to afflict the human race while commercialism thrives on the country. If pauperism were to cease, there would be no incentive for good men to make money in order to do good. No government

is supposed to be so narrow as only to administer to its own needs, and no church is satisfied to administer to just its own membership. The missionary spirit is spreading in every line of activity. The government bureaus supply, gratuitously, valuable printed information to any one who asks for it. The most valuable medical and surgical clinics in the world are free to members of the medical professions who wish to learn more, and these advantages could be sold for a price. The greatest discoveries in medical science have not paid the discoverer a penny of royalty. The Christian churches are spending millions each year to better the spiritual welfare of those who can never be seen or known.

No one can reasonably attempt to show that he has paid his way in full to the world. He can never discharge the debt of gratitude that he owes to his self-sacrificing mother. He cannot remunerate the government for the protection that is given. He may boast of his American liberty, but it was dearly bought with his great-grandfather's blood. The Christian religion is absolutely altruistic in its nature.

CHAPTER VI

STRIVING

It requires a very high degree of culture to get beyond the belief that striving is anything other than painful or uncomfortable. The leg must ache with fatigue before a long walk can be accomplished with ease. A gnawing sense of hunger bespeaks a healthy digestion when a full meal is taken. Behind every laborious effort there is some motive to serve as a stimulus. The word *stimulus* means a short stick, which was used to goad the ox to pull his load; thus comes the idea of pain behind effort. So it is with laborious burdens that cannot be borne without some strong incentive to action. No one will question the psychological truth that great effort, guided by worthy motive to success, gives greater degree of happiness than those things of a pleasurable kind that simply happen. There are many truths of this kind that are not easily found out except by experience, and occasionally not even then. So we must differentiate between the worthy and unworthy effort; for we may labor for that which satisfieth not, and we are very prone to shun those things which would be productive of happi-

ness. Strange to say the greatest sources of happiness are not of our choosing; for we so often fail to choose wisely. The fact of realizing happiness from sources that were assiduously avoided, prompts the logical belief that a kindly and merciful spirit guided us in our unwisdom; but our intentions were pious, and for this reason a belief in God's direction gives strength to man's endeavors. Saint Beuve said: "My work is my sore burden, but it is also my chief joy;" President Thwing is quoted as saying: "After all, the lucky man is the man with the hard job." It is not because the man is lucky in having a hard job, for many have hard jobs that never grow easier; but it is because he overcomes the bad job by striving, and in so doing he develops strength that finally makes the job easy. We may at all times make ourselves miserable in our work; when, if it were taken from us, we would esteem it a deprivation. One may magnify the disagreeable, and minimize the agreeable; whereas the process could easily be reversed.

We need education in the school of striving as in other forms of culture; for all forms of culture are not inborn, but acquired. The question arises: would not the man who makes a success of a hard job succeed without such an ordeal? Obviously, No; because striving would develop inherent powers; and many capable lives remain undeveloped for the lack of striving. Power spent in activity comes back twofold, and it was be-

lieved in ancient times that the strength of the slain foe passed into the soul of the slayer. It is a question of prodding the spiritual activity with the obstacles to gain greater power to overcome discouragement, and is another instance of inoculating the psychic system with objectionable spiritual bacteria, so to speak, to stimulate the powers of immunity to discouragement; for man's fate is an environment of troubles from which there is no escape except by the development of strength.

It has been said that " grace is the result of forgotten toil." A graceful acrobatic performance means that months of laborious exercises have been expended. Graceful characters have been evolved from the contention of effort with obstacles; and experience is the only school for such culture. In the effort of striving, we are made to feel, at times to believe, that we are missing the mark of our hope; but in such unwisdom, this effort finally reveals the fact that we are well on the way to the accomplishment of the hoped for gain. It becomes evident that the object hoped for is not the end, but a means to an end. In the Berkshire Hills is a cemetery, which contains a stone upon which is written: " My misfortune was my happiness." Of course misfortune is not happiness, but can be a means of attaining such an end, which could not otherwise be accomplished. This being true, tenacious purposes cannot be defeated by any discouragements, which is only the scaffold to the

building of contentment. But will not growth of happiness lessen when these obstacles cease?

It is a psychological fact that dwelling on past trials and troubles goes a great way towards undoing the good that such experiences have wrought, and it is a law of human nature to press forward. The wise mother has learned that the child should be encouraged to forget a whipping in order that greater profit may follow. The art of forgetting is a valuable asset in utilizing the good effect of discipline; and hope is a ruling passion of the spiritual nature, and hope never looks backwards.

CHAPTER VII

SELF-SACRIFICE

When we speak of self-sacrifice, we mean a surrender of that part of self that is always in evidence. This implies a painful experience for the majority of the human race, and the idea of devotion implies the existence of some higher motive. We cannot argue the question why we should be so constructed that the most frequent impulses of our nature are those of the undesirable kind, while the wiser desires lie hid. We might as well attempt to explain why tares grow more actively than wheat. The fact is we must not be guided by impulses altogether. It becomes necessary to differentiate the wise and unwise impulsive tendencies. The unwise is so frequently uppermost in our desires that they must be sacrificed; and, in this instance, the necessity is obvious. But there may be desires, aims, etc., that require to be sacrificed, that are not necessarily unwise; they may even be wise. In this instance the good arises by reaction. The wedded couple that can lay claim to the greatest degree of happiness is one that has exercised reciprocal self-sacrifice; congenial temperaments play only a secondary part

in the cause. Noble characters, who have won fame in the world, have met disappointment in winning happiness at home, because they have not learned to sacrifice self for the happiness of husband or wife. The testimony in divorce trials recounts the pride of unwillingness to offer any domestic sacrifice. As has been said, the first year of wedded life often proves the one most lacking in happiness; for a year's experience soon teaches the ordinarily wise that the lesson of forbearance is a royal road to happiness. Congeniality of spirits better enables a couple to learn more promptly lessons of sacrifice. To sacrifice a worthy opinion for the sake of harmony is worth while to gain a sympathetic influence; and later such sacrifices become unnecessary. This effect of self-sacrifice is perhaps more commonly observed. The spiritual part of man is more to be governed by the divine laws, and self must be given a secondary consideration. The individual must be subordinate to the general good if we would comply with the laws of our spiritual construction. Thanksgiving may be a form of self-sacrifice. "And let them sacrifice the sacrifices of thanksgiving." (Psalms 117:22.) Sincere thanksgiving implies the existence of a personal sense of unworthiness. This form of humiliation is not primarily a pleasant experience, but is productive of a wholesome reaction. The reaction in religious experience is the effect aimed at. The process of hardening physical vitality by cold

baths and even painful labor is followed by increased physical vigor. A traveler in India relates the experience of finding an intelligent Hindu priest, who had suspended himself by the heels a certain number of hours each day for the purpose of subduing the flesh. He also relates that this priest was very fond of the works of Emerson and had a complete set of the volumes. This form of sacrificing self is not the highest form of self-sacrifice. Bodily pain requires less fortitude than self-denial in a spiritual sense, which extends to the service of others. The " flesh " is not the self, although asceticism makes this mistake. The self that resists God and refuses service to man is more difficult to subdue than " the flesh." In fact, it may often be more selfish to retire to a contemplative life than to endure the hardships of service to the duties of life, and true self-sacrifice means service to the highest aims of constituted laws of God.

Alexander, Cæsar, and Napoleon conquered every obstacle but self; these military heroes went down defeated. There is mystical power turned loose when self is completely subdued; because man puts himself within the influence of the hidden powers that exist. Joan of Arc is canonized for that victory over self. A victorious life proceeds from the victories won within self.

The selfless person has an aura, which extends beyond the limit of vision and spreads a beneficent influence. It was related of Sterndale Bennett,

when he was thanked by a pupil for exceptional help, that he replied: "Madam, I always endeavor to give you not a music lesson but an hour of my life."

The truism that it is more blessed to give than to receive is based on the law of spiritual reaction. From a material standpoint, it is inexplicable that man should deny himself personal comforts that general good may be accomplished, and there is no analogue to this phenomenon in the world of animal life. While primarily in privation, the advanced student in spiritual experience realizes direct comfort from self-denial, because the joys of such are anticipated. When Christ admonished the wealthy youth to sell all his goods and give to the poor, there was a test of willingness to sacrifice: not that Christ believed that the giving of his wealth to the poor was the greatest good, for unwise giving of money will do more harm than not giving; but the willingness to sacrifice, and therefore the good of the reactionary benefit, was the object to be attained. Perhaps few in this day would elect the wisdom of Moses in choosing the afflictions of his people rather than the luxuries of Pharaoh's court; but one of the greatest characters in history has been handed down as the result of such wisdom. Moses' love for his people made him forego the temptation. In making proper decisions, unwisdom afflicts youth more often than any other age. Under such circumstances efforts at wisdom may not even be at-

tempted, and immature age rushes blindly on to the sad consequences. The lessons of self-denial are the most difficult to learn; and, but for the painful consequences of a lack of self-control, they perhaps would never be learned. Aches and pains are cautionary, and act as curative measures. Suffering differentiates iniquity from integrity, and innocence from guilt. These pains, if unheeded, destroy the sources from which pleasure arises. There are buoys set about in the sea of life, which are to warn sea-farers of hazard, and serve to indicate where a life sank. Poisonous food destroys one victim and the fatal lesson is recorded for the benefit of others. Such martyrs to free-thought as Hess, Savonarola, and Sir John Elliott won freedom for unborn generations; and political liberty has been handed down to us through the death of the soldiers of the Revolution. The tragedy of McKinley's death welded the bonds of sympathy between the North and the South. The poetic genius of Homer was nurtured by self-denial; and Dante's exile wrought his keen portrayal of the suffering of hell.

The lesson of self-sacrifice must be learned sooner or later if the true meaning of life is discerned. The seed must sacrifice its identity when germination resurrects the plant, which produces a flower that disseminates sweet fragrance in nature. As previously mentioned, the mud-wasp sacrifices her life's labors for her unborn progeny that she will never see. Inferiority of species and

inactivity must be sacrificed at the altar of the good of the race in the evolution of animal life. All unwise human desires must be struck down by the inexorable laws of the spiritual life, in order that the purest and best may survive. There is a star of wisdom that is always shining behind the clouds of turmoil and suffering; these electrical storms of self-sacrifice clarify the atmosphere that wisdom may shine the brighter.

Paul's life was a life of sacrifice; yet his joys were more intense than those that have been experienced by any other human soul. His love of Christ deprived him of his freedom through imprisonment; but was he not a freer man? There are no prison bars that can bind the human soul; and when man can shake off the shackles of evil and worldly environment, he then, and only then, becomes free.

The Greek slave, Epictetus, in speaking of his abject poverty, says: "Did any of you ever see me with a sorrowful countenance?" and adds: "You can put my body in prison, but my mind not even Zeus himself can overpower."

Over the front door of the court house in Worcester, Mass., is written: "Obedience to law is liberty."

Absolute freedom is an impossibility; for the universe is governed by laws, and no object can escape the influence of its environments. A stone, for instance, can never be removed from the influence of the laws of gravitation and those pecul-

iar to its chemical construction. All forms of life must respond to the laws of environment and heredity, which are necessary to a state of well-being. Freedom may, therefore, be used in a comparative sense and man becomes freer as he observes the higher laws of his existence; and absolute freedom, if possible, would be a very undesirable and anomalous state. Unrestrained liberty in indulgence to the lower passions and impulses is the highest form of servitude; and through self-denial, he may escape thraldom, and attain a greater degree of freedom. It may be asked, why the devotee to sensuality and Mammon reap disappointment; for that would seem to fulfill the ideal of pleasure. As a matter of fact, the laws of reaction promptly exact the penalty of pain and discontent. So the lure of gratification blinds the victim to greater penalties, which are inevitable. But self-denial comes in as a friendly officer of the law to give us advice, that we take to be unpleasant, how to avoid such penalties. The unpleasant advice is, many times, less painful than the dire consequences of self-indulgence, which are sure to follow. Self-denial, the unheeded officer, sits by as a sympathizing friend, when the inexorable penalties are inflicted.

The children of self-sacrificing parents who are imbued with high ideals and hampered by a lack of means, would be inclined to pity such a fate when success in life comes to posterity as a result. Yet these sons may realize that it has not come to

themselves to have the opportunity to impart their success to their own posterity, and if sufficiently wise would, later in life, covet the apparent misfortunes of their parents, which were the foundation for success.

"The scenes of this earthly life are fast fading from my sight. I shudder to look back at its sufferings and hardships, its unceasing demands and self-denial, its shortcomings with bitter humiliations and defeats. Thy love was in all of it and I feel that each and all has played its necessary part, and I don't wish any part changed. Ought we not to have suffered these things to enter the glory that shall follow this training, which we will need for the enjoyment of the beautiful life beyond? Life is a warfare between the spiritual and carnal, to subdue passion and evil inclination and the fight is against all sin. But we feel the conflict is lessening and can perceive that struggles and failures will soon cease. The din and noise of conflict is faint and we can now restfully stand on heights of victory to discern there is a higher. Only here and there we get a glimpse of the brightness of the coming dawn, when we shall emerge in an armor of light, complete and perfect in Christ." [1]

Life in its entirety requires to be viewed from every angle and a lack of this vision results in disappointment.

[1] From the unpublished diary of Mary S. Harbin.

We should be slow to pity that self-slaved mother, for we may live long enough to envy her and to realize that she has attained the highest form of wisdom, and in the finality of all human ideals we will discern that " white robes were given unto every one of them " (Rev. 6:11), " for they are worthy."

We read life in its beginning differently to what we do at its close, and as life is only a beginning of eternity, we must look beyond the grave for the finale.

The freest man who ever lived was Paul, who was in chains and in prison. He speaks of having " nothing and yet possessing all things." Cor. 11:6-10. He exclaims: " I know both how to be abased, and I know how to abound: everywhere and in all things I am instructed both to be full and to be hungry, both to abound and to suffer need." Phil. 4:12. This law of human nature, which compels man to look higher, emphasizes that independence of the pleasures of being rich will mitigate the pangs of poverty; that when health is not the greatest gain, illness will not be the worst misfortune; that when success in the world is not the highest aim, failure will not be the greatest disappointment. The goal of our aspirations must be set beyond the antipodes of human experience; and until this is reached, man has not made any progress towards attaining freedom. When man absolves himself from temporal affairs

and adopts the Christ life, he has reached the greatest degree of freedom that is attainable; for liberty is obedience to the highest laws of existence.

CHAPTER VIII

WARRING FOR PEACE

Peace is defined by a standard dictionary as "freedom from disturbance or agitation," and it is apparent that such a state of existence may be unwise if not undesirable, especially if such tranquillity is based on insecure foundations. It might be well to study peace from the standpoint of individual life and the first observation to be made is that the most desirable form of peace is not unborn. While some have more peaceful dispositions than others we must recognize that the most lasting form is envolved by the necessary trials and difficulties of life through which all real progress must travel and the genuinely peaceful are those tried characters who have emerged victorious through these battles. So peace must be a molded product and not a ready formed quality and it is fact that we are not born peaceful any more than we are endowed with any other form of education. Untutored we would be anything else but peaceful. All necessary human progress implies the existence of obstacles which create the necessity of effort to overcome opposition and in every individual life these contending elements are legion and peacefulness is never an absolute entity

but only a relative condition which implies a previous state of turbulence. The degree to which an individual may attain is measured by the effort expended regardless of any actual condition of peace because those may exist who have everything to inspire a peaceful state, yet never apprehend that real peace which all covet.

Perhaps the greatest battles are fought in the world of individual life when good and evil or the spirit and the flesh meet on battleground and such an order seems to be a psychological law of existence which follows the normal life. While we know these two general forces are ever striving for supremacy we cannot at the time differentiate one from the other, for that which seems to be good finally proves to be evil and *vice versa.* It is only after these battles that peace seems to come to us from some unseen Power but in the course of time because of forgetfulness and indifference it becomes necessary for the struggle to be again renewed for we seem to have forgotten that unseen Power and have lost our capacity for appreciation. It is beyond us to inquire why we are constructed that way but the fact remains and it is incumbent upon us to try to obey the laws of our making.

It would seem that our holiest desires and ambitions have perished for a purpose on these battlefields and we strive to keep their memories green but in due time we are led to acclaim there was Divine Wisdom in all of it. We may have con-

cluded that the evil forces had gained ascendancy only to discern later that it was for the good, while that for which we fought, esteeming to be good, only proved to be evil. How can order come out of such a chaos unless there be a Just God? And do we not return thanks to the God of our battles who brought victory even against our sacred wishes? Christ, the Apostle of peace, said: "My peace I give unto you," but "not as the world giveth, give I unto you." He spent His entire life showing man the way of peace.

What has been said of individual life is true of the home, the state, the nation and the world and the destiny of the world follows the same laws as that of individual life. Nations suffer as nations and individuals only as individuals. A nation may be decaying from the corruption of its rulers, yet it contains a good per cent. of Christian citizens. Shall we judge the character of Paul by the kind of government which caused him to be put in prison and did that corrupt government affect the peace of this Apostle? That type of government has sunk into decay while Paul's character infuses the lives of millions of Christians. As in individual life, issues must of necessity arise in the lives of nations and we might ask why? Because some ruling influences are evil and these are an ever present menace to peace. These influences may have been subdued in the past but they are destined to rise again for battle.

In the world of self a state of unrest sooner or

later arises which can only be settled by a house-cleaning of these warring influences and the same is true of the world of nations. The cost of this agony cannot be computed in either case but seems just as necessary in the one as in the other, because of existing conditions of evil. To urge that this should not occur would be the same as saying human nature should not be imperfect.

Even good citizens acquire inflamed prejudices that only cease after death while some live to see their mistakes undone. But having acted through ignorance will not repentance finally save them? Valiant Christians have fought bravely for that which they have lived to condemn, but repentance was their source of peace. We will never escape suffering from the bondage prejudice and ignorance for such a fate is our inheritance. Widows and orphans may learn from the vicissitudes of war what luxury would have failed to teach, and a soldier may die valiantly on the battlefield, whose death in times of peace would have been in ignominy. Death is not per se evil but the manner of death determines the evil or the good. The destiny of the nations of the world is not revealed to any generation and can one generation read the final results of any war? Shall any philosopher or statesman presume to be able to predict the final results of this world war, when he cannot discern the real causes that led up to this conflict? We must not be presumptuous in trying to pass on such great questions. When for the time being

we cannot understand the result of conflicts that rage within us how much less can we read the consequences of this world war. There is an Unseen Wisdom in national as well as individual life that rules a rebellious people for good through repentance. Do we not unwillingly cry out against the so-called misfortunes that are for our good?

Shall we decline to suffer for the sake of posterity when we have been the beneficiaries of the sacrifices of our forefathers? To fight without malice through misguidance, will redound to good whether we are among the victors or the vanquished, provided we repent. Under such circumstances time only can make men see clearly. War is not the greatest evil when misguided consciences come in conflict and would not be as bad as a peaceful Sodom and Gomorrah. A nation like an individual may be temporarily beside itself through misguidance or malice and while in passion can never be convinced of a wrong. But the process of conviction must necessarily be tedious and cannot be short circuited but suffering will inevitably follow and this is the only route to peace. Man is a slave of prejudice and the routes to liberty are slow and circuitous and emancipation may not be revealed to one generation. A Divinity seems to free him though against his will.

Facts are wiser than our philosophy for when we crave ease and a peaceful flow of life some divine wisdom sets in motion tragedies which play

upon prejudice and the great conflicts arise, anger inflames and we may die before the end of struggle comes.

The great purposes of the universe do not germinate and grow and mature their fruits for the sake of any one generation of man and we can only be a unit in this great system. Some would be inclined to assume that all the human progress of centuries should have been prepared for culmination in our own generation. But we are a bridge over which progress is to pass to future generations and we must endure our part in the sacrificial order of the universe.

War is not hell but an occasion for the display of preëxisting hell in human souls and was matured before the conflict ever began. To exterminate this hell battles must be fought. In times of war men show more of their true characteristics than are brought out under conditions of peace.

We are at times inclined to pin our faith to human standard but it has been recently revealed that our doctors of theology are afflicted with the prejudice of partisanship as others. So we are compelled to revert to classical standards.

The Unseen and All Wise must rule the issues of war, and since the demons of prejudice have instigated this war, all will not suffer in the same degree the dire consequences, for whatever material afflictions may come the righteous cannot suffer as do the unrighteous. We try to imitate the peaceful life of Christ without first trying to

purge ourselves of evil that is in us and in such inconsistency we follow afar off but through His sacrifice and our repentance only, are we made partakers of His peace.

Universal peace will never come until universal love rules the hearts of men and there are no evidences that the millennium of love has ever been near at hand, for the Devil has never yet been chained.

CHAPTER IX

SERVICE

"But he that is greatest among you shall be your servant." (Matt. 23:11.) English history records the incident of the son of the blind King of Bohemia when hard pressed in battle being tied to the horse of a mounted knight and rushed into the English ranks, where he was killed. The Prince of Wales who was in charge of the English army adopted his crest, which was three white ostrich feathers with the inscription, "*Ich dien*" (I serve), and since that time it has been on the coat of arms of the Prince of Wales.

The body politic is now passing through a stage of organization and coöperation into an era of service. The first was for mutual strength and benefit, but this era of activity is altogether altruistic. It is strange indeed that the truth of Christ's definition of greatness has been so slow to be appreciated, for nothing is truly great without service. Personal achievement, pomp and wealth now go for naught unless such attainments perform the duty of service, and this truth applies to every line of activity. It has always been applied to Christianity, but never before has the

truth been appreciated as now obtains in moral, social and commercial life. Even great corporations, which are supposed to be conscienceless, now have service departments which administer to the moral and physical welfare of their employees and to the benefit of their clients, and considerable expense is appropriated to maintain a department that brings no direct revenue. This law of service is the mainspring of activity in all methods of civilization.

When a great philanthropist said it was a disgrace for a wealthy man to die rich, he half way admitted the law of service for general good must rise superior to personal profit.

Being good is not a completed condition without doing good, and it is not sufficient that devils be cast out but the human soul must be activated by letting angels of service in. Ideals must rise above the plane of individual life to be of value, for otherwise a sort of self-poisoning ensues. Stagnation intensifies the impurity of water that otherwise would become cleansed by being agitated.

Service is but another form of progress. When a certain rich man said to his soul (Luke 12:19) "take thine ease," he displayed great ignorance of his making for his ignorance was rebuked when God said, "Thou fool." The meaning of the word service is inconsistent with the nature of satiety, for absolute ease is the *ignis fatui* that lures man's effort to the striving for a condition that cannot exist. This law of human

nature makes more success read synonymously with more service. The one who multiplies his talents by service will be able to serve in the day of reckoning a just and wise Master, while the man with one talent without service will be ready to exclaim that God is unjust and in that way robs himself of what he believes God ought to give him. Neglect of opportunities brings the worst form of pessimism, while those who do things gain optimistic tendencies. In the political world anarchists are formed out of a class of men who do nothing, and in the world of Christian churches there are anarchists among those who call themselves Christians who would criticise and mar the work of the organized forces of Christ, yet they never contribute any personal service.

To rid one's self of some great sin or temptation through much prayer and labor is not self-sufficient for progress demands that such victories should be buried and forgotten in the performance of service, if the Divine law of human nature is complied with. Strange as it may seem, we wisely labor for an absolute rest which can never come but a greater degree of rest can only proceed from a greater amount of service. Under existing conditions it would seem to be wisely ordained that man should not be able to see in his great efforts that complete success within itself in some particular undertaking will not bring perfect peace. But ignorance up to this stage is wholesome. Should success now be apprehended

as a means to a greater activity profit will arise, but should he attempt to rest at ease on his victories the truth of experience will taunt him with "Thou fool." A paradox arises when man may be wise in his ignorance because of the underlying principles of human frailty. It would seem legitimate for man to believe that pardon of some besetting sin and not to become further tempted, would gain spiritual success. Were he to believe otherwise, his efforts would be less sincere and arduous, but when relief comes a horizon of new activities appears.

CHAPTER X

TEMPTATION

The meaning of the word temptation is a process of testing. No course of collegiate education is worthy of the name that is not tested by a final examination, without which proficiency would be lacking. The dread of a final examination is by no means pleasant but acts as an incentive to more laborious study, and the necessity is obvious. If we decide to buy a machine, we would prefer to exact the most rigid test imaginable; greatly in excess of the normal functions that the machine is expected to perform. The test required may even go so far as to damage the machine.

If man must live in an atmosphere of bacteria, he must suffer invasions of infections before he finally gains an immunity. Without the occasional invasion of bacteria, he would lose his acquired immunity, and during the attacks there may be profound disturbances in the system.

In the school of life the lessons will go for naught, unless there is a constant preparedness for the final examination in the form of temptation. Strength of resistance measures the power

of spiritual vitality, which must be constantly whetted to stand temptations. "Lead us not into temptation" implies that temptation is necessary to keep spiritual vigor active. In the formation of great characters, temptation was an important factor in the development, and Plato calls temptation a midwife, which has delivered many a giant. Character, like a chain, is so strong as its weakest link; and temptation strikes at the weakest link which finally becomes eliminated.

Disease, like temptation, attacks the man when he is weakest; and "in the wilderness for forty days" typifies man's universal temptations, and when there is high tide of man's goodness, there is less necessity for temptation. Ruskin says: "No man can trustfully and honestly ask to be delivered from temptation unless he has himself honestly and faithfully determined to do the best he can, and all he can to keep out of it." When this determination is lacking, temptation comes along to break the weakest link in order that man may be stimulated to replace it with a strong link in the chain of character.

Temptation offers a means by which man may discover his weakness, which would otherwise go unrecognized. But after these weak links have been made strong by a struggle with the powers of Satan, we may rise to heights of clearer vision; and, as it was with Christ in the wilderness, after He had overcome the devil, "behold! angels came and ministered unto him." It would seem that

our struggles, when we have fought temptations bravely, provoke the sympathy of the angels of peace, who come and minister to us. A victorious fight seems to enable us to perceive the presence of these ministering spirits, that would be, otherwise, lost to our lives.

Man is a free-will agent, and is not the victim of destiny; and were it otherwise, moral progress would cease. In every temptation there is a solicitation to evil and an opportunity for doing right. A man, who inadvertently falls into a swiftly moving stream, does not intuitively feel that he is a victim of destiny in succumbing to the laws of gravitation; but he instinctively realizes that he must fight for his life. A fall into temptation does not imply that he cannot resist because of his supposed hereditary weaknesses. The laws of man's physical, mental, and spiritual environments declare that he must fight to overcome. There are obstacles wisely set in all forms of life to stimulate the powers of resistance. "The race is not to the swift, nor the battle to the strong" (Ecc. 9:11) represents a law of environment. Certain nervous tendencies, that run in some families, create a greater tendency to alcoholic and drug habits, and have been handed down by some imprudent ancestors. But it is incumbent on posterity to step in and break the chain of heredity, or else the family may become imbecile and extinct. One is a stronger man because he has overcome greater obstacles. All reasoning beings seek hap-

piness directly or indirectly; but the methods adopted vary from the most unwise to the wisest and the results obtained will be in evidence. Hazards in the form of temptation are strewn along the pathway of life to develop powers of spiritual resistance.

No stage of life undergoes the temptations that young manhood offers; in this stage, there seems to be the least resistance, and as a consequence, many victims go down in defeat, and physical and spiritual scars remain in evidence throughout life. But those, who successfully battle temptation, develop that kind of strength that is productive of happiness. For this reason, a strong character so developed in man is stronger than in woman, other things being equal; because the latter had not the temptations to resist. Verily sexuality is young manhood's bane of existence, even among the more piously educated class. The doctrine of equal purity of the sexes totally ignores the fundamental physiological laws; for chastity in the male is bought with the price of the greatest amount of self-control; while in the opposite sex, it is inborn, and is only lost by the over-powering influence of vice, ignorance and depravity.

From the standpoint of physiology, chastity in the man is a mark of strength of character; while a lack of it in the woman would mean the worst depravity.[1] Of course, moral environments have

1 The doctrine of equal purity of the sexes sets aside those natural differences which may be observed in all

a great influence; but they do not set aside those natural differences in impulses. Young manhood cannot escape certain tendencies of nature, though the most rigid moral seclusion were enforced; while young womanhood may be kept in entire innocence indefinitely. The crime in the one is aggressive; while the fault in the other consists in the lack of strength to resist environments.

The man who has resisted temptations of this class, can derive more happiness from the obligations which are assumed later in life, than the one whose proclivities are less marked. The so-called "social sin" is one result of failure to resist temptation, and may afford pleasure; and some

animal life, and until young manhood gains sufficient growth in discretion and self-control he may remain a victim to those impulses despite pious environments. Chaste women are almost the invariable rule while the same pious training fails in many instances to keep the man chaste, and if the natural impulses were reversed in the two sexes the results would be correspondingly reversed. It is strange indeed that the two sexes can so little appreciate their opposite tendencies and for this reason the doctrine of equal purity obtains stronger support among women. A man is no worse, and perhaps is better, because of this temptation, provided he has strength to overcome it; and even if he become a victim and sorely repents, he may be better than one who never had such temptation. Even Christ said that harlots because of their repentance would enter the kingdom of heaven before others who had led self-justified and correct lives. From a physiological standpoint purity is a virtue that comes to woman free handed while the same virtue in men may only be won after the fiercest battles that have ever been fought in the world of individual life.

will risk the hazards that may follow for that pleasure. It is not only a social, but a physical and moral, sin. There are those who sell their birthright of happiness from chastity for a mess of pottage of temporary gratification. They may then seek to regain it with tears of disease and remorse. Some even attempt to count the cost and yet choose unwisely. Physicians can quote the testimony of the victims who, later in life, after domestic obligations have been assumed, exclaim: "What a fool I have been!" Was there pleasure? Yes: but what was the price paid? Ask the physician. Some of the diseases most rebellious to treatment belong to this class. Great suffering, disease in the innocent, impotence, sterility, and moral degeneracy is the price of not controlling a seemingly well-nigh irresistible passion. The sins of youth create a great moral and physical burden on otherwise good men in later life. The physical reasons alone furnish sufficient argument against the social sin. Repentance affords divine forgiveness; but Nature never relents, and the victim must carry the marks of disease through the remainder of life.

Man may be better and stronger because of his struggle with sin than never to have had such temptation. Jacob limped through life but was a better man because of his lameness, and some one has said it is better to go limping into heaven than leaping into hell.

So the effects of not resisting temptation are

far-reaching; and, on the other hand, by overcoming such obstacles, the results radiate peace and happiness just as far in the opposite direction.

CHAPTER XI

HUMILITY

Humility is the ability to estimate self with the surroundings in correct proportion; while pride is marked by obliquity of such judgment. Some would consider humility an undervaluation, and pride an overestimate of the merits of self; and that truth lies between these two extremes. Perhaps the etymology of the word, coming from *humus*, the ground, accounts for that tendency. In the correct use of the word, humility represents the truth of self, and has no relation to the comparison of persons, but it is a comparison of ideals of aspiration with self; and where this is the case, a sense of humility expresses the truth. Justice compels a feeling of humility when a comparison of the merits of the case with high ideals of self is set up, and humility is the direct result of taking stock of self in one who is at all wisely disposed; but when one who ignores the classical ideals, undertakes to set up a comparison of self with some commonplace neighbor, pride at once gains ascendancy and this narrowness of vision, in the final analysis, results from ignorance. So a man who has a very limited horizon of ideals will be easily afflicted with pride.

Humility is a trait of the greatest characters in history; and as age and wisdom increase, humility becomes more and more in evidence. Ignorance, inexperience, and youth prepare the way for pride; while wisdom, experience, and age make for humility.

The ablest scientist, by his broadened vision of the unknown, sees much to make him feel humble that he knows so little; while the novice feels proud of his knowledge, because his mind cannot penetrate the realms of the unknown. After fifty years of study, Lord Kelvin, perhaps the greatest scientist of the century, deplored the fact that he had learned nothing of the nature of electricity. Success in life does not stimulate pride, but humility; and the greatest men of the world feel their weaknesses more keenly than their inferiors. "A little learning is a dangerous thing," in that it leads to pride, which is, in its final analysis, ignorance.

In the moral realm the same relations hold, and any Christian is humiliated by falling short of his ideals and his sense of justice compels it.

It is conceded that worthy ideals, set for human endeavor, must be unattainable, and therefore divine, as taught by Plato, and the Christian aspires to the perfect Christ. When the best man compares his attainments to what he aspires to be he feels his imperfections more keenly than ever.

This feeling is not primarily of the pleasant kind; but we readily see that it acts as a stimulus

to higher development, and spiritual progress would be blocked without it.

Prayer is the exercise of a natural function of the soul that all moral natures possess, and a feeling of humility stimulates this function. The recognition of accomplishing so little makes us pray for strength to attain more.

Humility cultivates the sense of appreciation; and when man's sense of justice perceives that he receives blessings out of proportion to his merits, he is led to appreciate things that would otherwise pass unnoticed. No honest man will question the fact that he receives more than he is justly entitled to, and appreciation becomes a key to happiness. The so-called pain of reality is humility; while the pseudo-pleasure of falsehood is vanity. It is painful, but just, to admit that our merits are so small; but does not this feeling of pain stimulate us in the betterment of conduct? On the other hand, self-esteem makes us ignore the merits of the case.

Praise is a mere incident and is of secondary importance to one who has striven to do his duty, for his greatest reward consists in his inward recognition of faithfulness; while blame makes a greater impression in that one is stimulated to investigate the truthfulness of the accusation, and is thus led to a betterment of conduct.

One who solicits the praise of others is apt to ignore the true source of happiness from duty, and such defects are not improved by continued

praise. "Woe be unto you when all men shall speak well of you." Even the best Christians derive greater benefits from blame than from praise; for the weakest points, by which men fall, are strengthened. The law of moral progress was enunciated by Christ, when he said that he who abased himself should be exalted; for abasement is a means of strengthening the weakest links in the chain of character.

CHAPTER XII

DIVINE DISCONTENT

A higher form of discontent is one of those feelings that we do not apprehend primarily as of the pleasant kind, but one that is necessary to all kinds of progress. The boy who remains contented with his lack of knowledge will go through life crippled in his career by a need of education; and the man who is satisfied in his poverty will likely remain poor. So a satisfied feeling will block all forms of progress, and the degree of pain in dissatisfaction will, to a great extent, be a measure of accomplishment. Emerson has put it: "Sitting on cushions of advantages, we go to sleep." But this sleep will not be lasting; for unwise comfort will soon be followed by real discontent, which may, or may not, be remediable. A divine discontent for the highest and most unattainable aims of life will bring a greater degree of contentment than can be furnished by any other source. A longing for the perishable aims of life multiplies discontent many fold. Sleepless nights on account of riches bring the greatest amount of poverty but a restless longing for divine wisdom and guidance is the most wholesome

endeavor man is capable of undertaking. It is not in the nature of man to be satisfied by meager accomplishments, although his sense of temporary ease may for the time being persuade him otherwise; but a day of reckoning will come when his enlarged vision may reveal to him the possibilities that were ignored. Now, if he should bestir himself with discontent, such disaster would be avoided. A feeling of dissatisfaction that is cultivated early will have a wholesome effect; while that same feeling, if it has been thrust upon him by the irrevocable order of events without any wisdom or foresight, will cause permanent form of discontent, that may happen too late for amends to be made.

As has been written, "Without vision the people perish"; and those wise characters who have this vision suffer more than others. But such suffering is wholesome, and is welcomed by martyrs to the best interest of humanity. The soul in its upward growth must have its growing pains. Saul of Tarsus lived a life with perhaps more contentment before he discerned the Christ; but his vision was a greater reward than any personal contentment. David Livingstone's vision of the need of poor Africans made him forget the contentment he might have had at home; but do we not esteem his vision worthy? Our visions must be higher than self-satisfaction and happiness, if we would conform to the divine law of human nature. No temporal ideal will satisfy a human soul

and our ideal must be set in the perfect Christ. The road of wise discontent will lead to the throne of real content. "So long as there is psychical development, there is always a Quest of a Holy Grail."

Real danger lurks in the fact that inferior things may satisfy us. The evil and unworthy things of youth finally satisfy the boy, but therein lies the danger that wise parents should seek to avoid.

Man is a free-will agent, and in his freedom there may be perils according to his unwisdom. The soul has the power to rise or fall, to press forward or backward, to expand as well as shrivel, and in either extreme to be more or less satisfied. Whatever environment there may be, there is always a lurking feeling of contentment that steals over us. A certain amount of wisdom should be cultivated, and progress is evident when we can rise to discontent.

Sin first stupefies, and then satisfies; but the real self will not be satisfied, although our degenerate tastes may be content. This real self is the divine part of man that can never be appeased by the husks of the world. A longing inevitably arises to return to the Father. The ideal of Christianity awakens an unhappiness and discontent with ordinary environments of life, and appeals to the higher self. They that hunger and thirst shall be filled, but not until that feeling of discontent has gained a strong hold. As in all

the powers of human nature, the possibilities are in excess of the actual, according to William James, who says: "Man possesses powers of various sorts which he habitually fails to use." Discontent is one of the greatest incentives to stir these latent powers.

CHAPTER XIII

GRIEF

Pain and disease are facts to be reckoned with, but it is not easy to determine the limits of the wholesomeness of either affliction. We cannot unqualifiedly condemn pain as evil, because pain may have a wholesome as well as harmful effect. Neither is it easy to determine where the one effect ceases and the other begins. Pain may be in one instance wholesome, and in another harmful, according to individual conditions.

It is accepted that absolute comfort is not consistent with the highest forms of progress either in the material or spiritual realms, and we must accept certain discomforts, and even pains, for the beneficent ends to be accomplished.

It is especially true of the spiritual world that discomfort, pain, and even grief are more potent factors in developing moral and religious culture than the pleasant kind. It is beyond our province to attempt to change such a law, but it is thoroughly consistent to try and discern certain benefits that accrue from obedience to such laws of human nature. The wholesomeness of the effect of pain does not lie in suffering *per se*, but in the manner of endurance. Rebellion to pain works

for evil, while right endurance makes for good and happiness; and, obviously, what one esteems a duty, another accepts as an affliction from which no good follows. What the wise would esteem a privilege, the unwise accepts as evil from which evil results proceed.

So right endurance is the key that unlocks the philosophy of pain.

There might be some argument for rebellion, if it would annihilate pain; but such an attitude intensifies suffering. The attitude of the victims of disease should not be one of intolerance and impatience, but of resolute endurance as means of promoting recovery, thereby lessening the amount of actual pain.

We would regard disease as one of the minor sources of human distress, for the greater part of human misery proceeds from the spiritual realm. Drugs can palliate physical suffering, but psychic distress can only be relieved by philosophy and religion. The man who swears at a fate that allows a dear relative to be taken by death is a poor philosopher, and his last state will be worse than the first. The one who accepts such a grief as one of the inevitable misfortunes of life, by heroic endurance, is a Stoic. While disease and death may proceed from ignorance and imprudence, these calamities are, at times, unavoidable; and the fact of vulnerability must be accepted as a fact of the order of things. But the one who accepts grief as misfortune that can be used for

spiritual profit is a Christian, because his ideals are set beyond any temporal experience.

It may be true that cultivated indifference will prevent or lessen grief, but this tendency violates the laws of man's spiritual nature. The sensitiveness to pain is a possibility for betterment, if right endurance is used; while such benefits could not be obtained by stolid indifference.

Who can deny that every condition of life, pleasant or painful, is for the best in one who believes it is for the best? As a matter of fact, a man cannot construe the philosophy of life as optimistic, until he believes a wise God rules the universe.

The highest ideal for aspiration is the life of Christ — a disciple of pain and suffering; yet we try to emulate His example in everything except His sufferings. We covet His crown of glory, but not His crown of thorns.

"In the world ye shall have tribulations, but be of good cheer: I have overcome the world," by right of endurance, "that in me ye might have peace." In the world, good and evil are present, and tribulation — meaning a threshing process — separates the one from the other, and in doing so, much pain and suffering may be entailed.

Sorrow belongs to the order of life, and a greater Wisdom has established this order. Some one has said: "No one is so miserable as he who is afraid of sorrow; no one is so happy as he who has learned the riches of sorrow." In our igno-

rance we fail to make use of sorrow, and thus far suffer; and as we are free-will agents, sorrow either works for our betterment or detriment, for all harm proceeds from within, and not from without. A life not stimulated frequently proves a worthless life. The oyster that harbors a bit of sand under its shell produces a pearl by its irritations. Pain and sorrow are beneficent signals for readjustment, for these irritations stimulate research for greater wisdom.

The boy at college, in seasons of gayety and merriment, forgets the piety of his home training; but when the reaction follows in being lonely and homesick, he is led to pray more sincerely than ever to the God who ruled the atmosphere of his training. Many a boy during the desperate illness of a mother or father has been stirred to vows for the betterment of his life that constantly beckon him throughout life's journey to old age. Sorrows are often the occasion of vows that a life will thenceforth be devoted to the accomplishment of more good in the world. Pleasure stupefies, while pain stimulates progress. Many a devout mother has sorrowed over her sleeping children for fear they might die and has been led to reconsecrate her energy to their pious training.

In the various vicissitudes of life the advent of sorrow may make a man seek more laudable aims if rightly interpreted. Perhaps every sincere Christian in reviewing his life of spiritual progress has mile posts of sorrow as establishing epochs in his

onward march, which are later learned to be the true causes. In view of such experiences, he may discern an arrest of progress when pain and sorrow have been absent. Sorrow is the mid-wife that attends the birth of twice-born men.

CHAPTER XIV

REMORSE

Perhaps no form of pain equals the suffering that proceeds from remorse; and, for that reason, no other form of pain is a greater stimulus to betterment of conduct. When the susceptibility to remorse is lost, there is no hope of betterment; but the permanent effects remain, and are like an incurable disease from which the victim must ultimately suffer.

The confirmed criminal has lost his sense of guilt and no other course in life is left but to remain a ward of prison life. Yet it is hardly possible that a feeling of remorse can be entirely lost, though it may seem to have been dormant for a period of years of active life; but in old age an awakening usually arises. In man's sense of his short-comings is directly in evidence of his moral culture, which explains the beneficent effect of remorse. Instead of benumbing this sense it is evident that all reformatory methods should have in view the object to regain this lost function. In the State laws, restraint of liberty and corporal punishment seek to rouse this function, at the same time protecting society from these criminals. So there is great

hope for society when men can feel chagrin at the commission of crime; and this capacity to suffer will be in evidence. Physical pain has certain bounds, but remorse is the greatest of human woes; and, unless corrected, it can have no self-limited duration. Self-condemnation brings utter wretchedness. Repentance for wrongdoing is the beginning of right doing, and in the spiritual world the highest type of Christian is one whose sensibilities to remorse are most acute. If love and joy tend upward to perfection, hate and confirmed remorse tend to the destruction of peace; and may not the picture of a lake of burning fire and brimstone be but an imperfect description of torment? Physical disease and suffering are insignificant when compared with confirmed remorse. While remorse at first is wholesome and premonitory, later it becomes confirmed and rebellion hastens the destruction of peace. A seared conscience is one that has been burnt to insensibility; for the destructive effect of cautery of heat gets to be less painful than a less intense degree of heat would produce, but reaction will follow.

Life is governed by antitheses, and the capacity to enjoy the best carries the same capacity to suffer from the worst. We cannot hope for heaven without fearing hell; and in the degree we can enjoy the one, in the same degree we must suffer from the other, for this suffering is inevitable. A prominent divine has truly said: "Hell is weariness without rest, existence without hope, and justice

without mercy." Ignoring the possibility of such a tragedy is no proof that it may not occur. A murderer may expiate his crime on the gallows, yet the years of moral digression made no impression upon him at the time. So, many are stealthily caught in the net of destruction woven by the law of cause and effect.

Primarily the feeling of remorse served a warning, but it went unheeded and up to a certain point was wholesome.

Remorse is the result of the spiritual house being divided against itself, in which all the faculties are out of harmony destroying the faculty of hope. The baser gains supremacy over the refined nature; unwisdom tramples down wisdom; hate has destroyed love. Remorse implies the past exercise of a free will agency in which an opportunity to do right was offered but the opposite course was elected and self-reproach followed.

The past is an inexorable verdict, the effects of which cannot be changed without the mercy of God, and the victim may place himself beyond the reach of this influence. After the probation of life has expired, man is plunged into an eternal abyss of remorse. No murderer, however depraved, ever expects to meet capital punishment, or spend the remainder of his life in prison; but many do so who seem to have ordinary intelligence. While many escape the State laws, no one escapes the Divine Law. By analogy, without mercy the confirmed sinner must suffer damnation. If there

is a heaven from loving and doing good, there must be a hell from the doing of evil and from hate. The narrow, straight path of doing right is not as broad as the road to destruction, and it is incumbent upon the travelers in the road of life to attempt to discern any deviation from the narrow path, and such discernments can always be made at first. But once well in the broad road, the victim rushes blindly on to destruction as " the fishes that are taken in an evil net, and as the birds that are caught in the snares."

The signboards on the road to destruction are not always printed in large letters, and may be indistinct to those whose moral vision is astigmatic, and who elect to follow the crowd.

In Christian experience, the degree of repentance measures the amount of joy, and at times it would seem that correct conduct without repentance goes for naught. In the parable of the two sons who were ordered by their father to work in the vineyard, the first was justified because he repented after saying he would not work; while the second, who said he would go and went not, and did not repent, was not justified. Christ further taught that publicans and harlots, who repented, would go into the kingdom of God, because of their repentance, before those who had led exemplary lives without repentance. The value of St. Augustine's confessions lay in the fact that his life had been buried in the mire of sin. In the parable of the two debtors, one owing five hundred and

the other fifty pence, both were forgiven by their creditors when they had nothing. In the first one, more was forgiven and he repented more, and therefore loved more. "But unto whom little is forgiven, the same loveth little." (Luke 7:47.) So we see that Christ taught that repentance is a great stimulus to love; and when we esteem our lives such that we need no repentance, self-justification has destroyed the capacity for love.

CHAPTER XV

OLD AGE

Perhaps a majority of the unwise would look upon old age as one of the painful and unavoidable stages of life that every one must meet with some kind of philosophy. It may be wisely construed as a stage of hope and peace; or it may be unwisely accepted by rebellion with attempts at regaining lost opportunities for spiritual stores.

The history of all physical life is: birth, growth, maturity, decay, and death. Every stage of life bears some causative relation to succeeding stages. The query arises: Does not some beneficent law underlie these facts of life?

Degeneration is usually looked upon as serving no good end whatever. In the evolution of all animal life, there is a striking effort at harmony with environment. The juvenile barnacle is more complex in its structure than is observed later in life. At first it is an active, free, swimming crustacean, which after a time fixes its head to a piece of wood, losing its organs of sight and its powers of locomotion, and degenerates into an ordinary ship's barnacle. It is stated that sea squirts have degenerated from vertebrates. Mites are degener-

ate spiders; parasitic worms have lost the organs of their ancestors, and live a life of effortless luxury in the bodies of their hosts. Species of animal life oftentimes degenerate to suit peculiar environments, and single parts of the animal show the same tendency. The ancestor of the horse, for instance, had five toes. Four of these have degenerated that the usefulness might be promoted.

It is now noticed that certain parts of the human anatomy are degenerating. What is the use of having eyes adapted for far seeing when there is no need for them? What is the use of hair when the hat makes the head comfortable? Teeth may finally become useless when food can be as well prepared by machinery. Man does not need the teeth and jaws of the gorilla. Wisdom teeth are beginning to be useless appendages. The bird originally had teeth, but they do not need them now. We do not need teeth to crack the cocoanut when a hammer will do as well. There has been no harmful result from the loss of the muscles that prick our ears like a horse. Because of these degenerations man has gained in other ways. To maintain an unnecessary organ brings about an unnecessary physical tax. The appendix was originally of some use, but now it is an encumbrance and is liable to inflammation and sloughing, causing a leakage of infection into the peritoneal cavity, producing a dangerous disease, peritonitis. The pineal gland at the base of the brain in the lizard was once an eye. It is not necessary for

man to grow hair, when clothes will keep him warm; and he does not need claws to climb trees, when a ladder can be used. In the language of a scientist: "We must cease to attribute evil connotations to the term degeneration. Degeneration is a necessary accompaniment to progress." Physiologically man is supposed to die from old age at one hundred years; but disease, either hereditary or acquired, brings decay earlier than that age. Self-poisoning, from improper food and hygiene, brings about the symptoms of old age earlier in life. Strange to say such diseases as nervous dyspepsia, asthma, headache, etc., seem to prolong life by counteracting the self-poisoning from certain digestive troubles.

Therefore a man of robust habits, who indulges his appetite freely, is not so likely to attain an extreme age as certain types of invalids. Nervous, dyspeptic women, after a certain age, have more health in old age than their robust husbands. Doctor Oliver Wendell Holmes says: "If you want to get a long lease on life, acquire some chronic disease." Metchnikoff first advanced the theory that premature old age was brought about by self-poisoning, due to the germs of fermentation, and suggested the use of buttermilk bacteria to destroy these germs.

Analogous processes may be observed in the various stages of life of the individual man. The toy rattler for the infant amuses for a time, and after serving a purpose is cast aside for a more

complex toy. Simple pictures are discarded for a puzzle picture. Simple sports give way to the exciting games of youth. Simple undertakings make stepping stones to greater accomplishments. With the experience of crude devices, ingenious inventions are made possible. The careful solicitude for a small shop makes the possibility of the merchant prince. The effort and devotion to the clumsy speech of a young lawyer is the beginning of great statesmanship. Our taste and devotion to these various stages of life die or degenerate with the accomplishment of certain aims, and can never be experienced over again in the onward march of life, and all of these are but stepping stones to the attainment of the ends of human laws, which are the substrata of life.

The law of all life is progress even in old age, and Prof. William James says: "We live forward and understand backward." Philosophy tells us there is no present, and that every moment is fleeting. It is an impossibility for old age to live wisely in the past as this law is violated and is not a condition of satiety, but still a stage of hope and progress. Hope is the most constant function of spiritual life, and the fable of Pandora's box is evidence of its early recognition. It follows the psychic course of life, which never turns backward. In every stage, worthy effort or sacrifice lends hope to the succeeding stages of life. Hope in childhood is a preparation for youth; youth, for adolescence; adolescence, for maturity;

maturity, for old age; old age, for death; and all, for eternity. When youth gives no promise to manhood, this law of human nature has been violated; and the same law of hope pertains to old age. All hope ceases except that arising from the consciousness of having discharged the responsibilities of life up to the stage of the decay of the faculties. So life is a life of hope, and if we ever arrive at a stage in life in which we cannot hope, a law of our being has been violated, and discontent will naturally follow.

It may be stated that the faculties degenerate for a purpose in old age. As there is a time to be born, to marry and prosper, so there is a time to become old and physically inactive. Each stage has its purpose. The function of old age is not to make money, win fame, etc., for more or less of these are supposed to have been done, but to contemplate, hope, and be a store of wisdom to younger generations. In every stage of life there should be times for review and study in solitude in order to press forward. If physical life could meet the activities of maturity when old, much harm would result; for there would be less opportunity for preparation for the next step,— death. Spiritual activities must grow because physical functions decay. Pleasures that once delighted now become monotonous and can never be repeated. Old age, because of the increase of inactivity, tends towards a betterment regardless of the previous history. Criminals are less vicious

in old age. There is a tendency to become more serious minded as gray hairs are in evidence on funereal occasions.

Restless attempts at the activities of mature life are pitiable in old age, and shut out the normal functions of this stage; such as hope, the consciousness of having discharged the responsibilities of life, the wise survey of life, the admonishing of the young, etc. This law of life shuts out the laudable activities that nobler aims may grow. The angels of commendable success vacate that the archangels of peace, hope, and immortality may inhabit.

Trying to live backward is but a confession of having neglected the opportunities of the past; for a well-spent life never wishes to be lived over again, and the promises of the future are too alluring. Only the fatigued soldier can enjoy a real rest, and service has ever been the law of life. No man, who has ever experienced and faithfully performed the acute activities of life, would care to live them over again. While youth may unwisely pity old age, at the same time old age feels sorry that the young realizes so little the gravity of existing responsibilities which will be revealed later. The pleasures of life perish with the using, and the same degree of enjoyment can never be repeated. Active life is the scaffold for erecting a structure of wisdom, hope, experience, and peace for old age. Old age furnishes an opportunity for believing that certain disappoint-

ments of life have proved to be blessings, and served to stimulate higher attainments, which otherwise would not have been understood.

The philosopher and poet Browning reads the inner laws of the soul in his poem on old age, "Rabbi Ben Ezra," and I quote an interpretation of this poem found in the diary of an aged mother.

"Growing old is better than being young, and the last is far better. God planned it so; and youth hath not half the joy and rich stores of truth that enrich the soul, which the years have brought. Trust God and be not afraid and you shall see.

"The hopes and fears of youth's brief years I do not regret, but prize them for what they taught. This life was not given us to enjoy and seek alone for pleasure, to feast and pursue its vanities, which allure, but can last but for a moment, and sure to end, as we are sure to end.

"But rejoice that we are allied to God who fans that little divine spark within and causes us to long for God. Let us welcome grief, sorrow and cares and pain that bids not for ease; and let it be more of pain and less of pleasures that disturb, to bid us upward and onward.

"Life's success lies in what it seems to fail; and what I aspired to be and was not, is my great happiness. The importunities and prayers, God in his infinite love saw was not good to give but bade me only trust his great power to save and give grace and strength to help my soul on its lone way.

"The rugged, rough path of life, stormy and oft pricked with thorns, more of pain than pleasure, made me better than were it smooth and soft for repose. It were better that youth should strive for conquest over wrong and sin with temptations to overcome that age may bring peace and quiet, exempt from strife and further temptation, that we may await death and not be afraid.

"Youth being ended, its loss or gain I should consider and weigh. Let it be blame or praise, old age will speak the truth and give us peace at last.

"Earth changes, but God and the soul are ever the same. Let us look up, not down; for we need thee, God, to remake and mold us. Thou lovest us and doth need us, or else thy great care would not have been to make us perfect by taking away the imperfect.

"Let thy glorious plan be complete in old age and death; we have found rest and peace at last." [1]

Old age is a stage of life where the apparent inconsistencies of life are dissipated by the clearer vision of experience. Is any one who has not reached old age competent to judge life in its entirety? Old age without peace is a tragedy; for there are no makeshifts in the diversions of life available, and were they present they could not be utilized. It is well worth a study of life in its true aspect to avoid such an ending; for, otherwise, old age may become a care to its generation. But if

[1] From the unpublished Diary of Mary S. Harbin.

life is lived wisely, this stage becomes a mine of wisdom to be drawn upon by the young. Old age is a stage of life set for stock-taking, for counting profit and loss. All business corporations, after a season of great activity, select a dull time in commercial life for the same purpose. A reckoning should be made in every department of human endeavor, and the wisdom of it is obvious. Old age may be compared to the ripening of the fruit of the plant. The plant germinates, grows, blooms, matures, and ripens the fruit after the members have decayed. It may be asked why the ripening process is attended by a degeneration of the other members of the plant. It can be answered only by saying that it is in pursuance of the order of life, and if the ripening process cannot take place without the process of decay of the members, it must take place because of degeneration. So it is with human life. We might, therefore, inquire what is the golden fruit in living. The classical standards of history unequivocally answer, "spirituality." As man physically decays he should grow spiritually, if he has lived spiritually a physiological life. But it is safe to say that not nearly every one lives this physiological life.[1]

1 A popular writer says, "There are no fierce passions in grandmother's heart but there are angels of dead passions who walk among her thoughts as stately shadows pass through gardens of roses and rue. She is old, not bitter. The little graves in her heart are covered with long June grass. The dead days of joy, each is marked with a cross.

The spiritual life is missed by following inferior aims, and the real fruit will be blasted. Old age without spirituality is a tragedy, for "Piety is the only proper and adequate relief to a decaying man." ("The Rambler," No. 69.) Many mistake the members of the plant for the fruit; and, because of this mistake, disquietude will reign, and the old man becomes a care to his generation. Not so with those who have cultivated wisely, and have accumulated wealth of spiritual stores that make for happiness.

Every stage of life has its functions to be performed. The one must not borrow from another. The function of old age is to lessen, or cease, activity; but it requires a bit of philosophy to sit still when the inactive stage has arrived, but the richer stores must have been accumulated to be drawn upon. Some may discover, when they are old, that they have neglected activity in the height of maturity, and try to make amends; but such attempts are useless. Wise old age should be longed for, when we shall be rid of passions, ambitions, uncertain labors, and many disappointments which have been fought bravely. We can rise to heights of vision never before contemplated. The richer fruits are not usually the most conspicuous attributes, but usually lie more or less hidden. Happiness is one of these, but the exact nature of

"A happy child is a happy animal; a happy girl is a happy heart; a happy mother is a happy human, but a happy grandmother is best of all, for she is a happy spirit."

it is not primarily easily apprehended and defined. It is, directly or indirectly, universally sought, though the aims may be more or less misguided. The richest metals and the most precious gems lie hidden in the world of nature, and require much labor and diligent search to find them. The difficulty of finding them enhances their value, and this is a universal law of psychology which applies with equal force to spiritual treasures as well as all other desirable attainments. I will learn to love to be alone. As Ibsen says: "The freest soul is the soul that's alone. I shall try to show the world that old age is spiritual opportunity, not physical calamity."

CHAPTER XVI

DEATH

In every form of activity in the world of nature there are opposing influences: one attracting and the other repelling. In the atomic world, some particles attract while others repel, according to certain laws. There are two elements of force in electricity, one positive and the other negative, each having affinity for its own class. All forms of life have their peculiar opposing influences. The swelling of the seed by moisture and warmth bursts the shell that the plant may germinate, and the germ loses its identity for the sake of the plant. Of the millions shed abroad in nature only an infinitesimal part overcomes the hazards of environments and go on to germination. Only a small part of these ever go on to development of a mature plant. The same is true of animal life, and it would seem that destructive processes of death are more active than those of life. The query arises why should it be so? The answer is that it is in conformity to the law for the betterment of species.

In the human ovaries there are seventy-two thousand Graafian follicles, which, theoretically, would explain the possibility of as many offspring,

if every one of them should germinate. While in the male there would be, theoretically, a million times as many. So destruction is written among the primal laws of the human race. A great proportion of the children born die in their first year, making 25 per cent. of the total number of deaths. The processes of death are active in the beginning of life, and continue to battle with the vital forces throughout man's earthly existence. It is stated that after seven years of life, the old cells of tissue are replaced by new ones; but these vital forces keep on replacing the loss from degeneration and waste. Scientists tell us that we have a new set of brains every two months and during the climax of vitality death is still active while reparative processes are more active. Before the age of maturity, the reparative processes outweigh the destructive forces; but after this age, the degenerative processes gain ascendancy, and death must ultimately win. Supposing that a man has been born with a good constitution and lives a hygienic life, it may be assumed that he will die a natural death at the age of a hundred years. Man must die sooner or later, because of certain laws of his biological nature, which no theory can explain. Disease and accident bring about death earlier in many instances.

As has been mentioned, there are as many leucocytes in the human system as there are inhabitants on the earth; and, if there were enough bacteria to destroy a sufficient number of these body

guards, death would result. In any ordinary boil the processes of death are displayed in miniature; for every pus cell represents a dead soldier-corpuscle. But the process is not sufficiently extensive to affect the entire system. In acute general disease the destructive processes are more numerous, and, but for the system's developing its own antitoxin, every general disease would be fatal. But man's exposure to disease has stimulated his power of resistance. Arterio-sclerosis, or hardening of the arteries, brings about premature old age, and is believed to be due to a chronic infection of the large intestines from excessive proteid food, along with over-work and various other forms of imprudence. While this condition *per se* is not so fatal, at the same time intercurrent maladies, Bright's disease, apoplexy, etc., develop more frequently to destroy the patient. This brittleness of the arteries is likely to show itself by a rupture of the vessel at a certain place at the base of the brain, which causes more or less extensive paralysis, from pressure on the nerves produced by the blood clot.

The phenomena of death are very variable, sometimes painful and at other times not. Dissolution may take place slowly, and at other times rapidly; and, exceptionally, a physician may be entirely misled by the symptoms, which do not portray the exact picture of the lesion of the disease. One phenomena is nearly always conspicuous, and that is the great struggle which is going

on; for a placid sleep, even in coma, does not betoken death. The pulse, blood pressure, and temperature are excessively high, and breathing is labored; but these symptoms usually follow the beginning of unconsciousness. Pain is no index of danger. The excruciating torture of one who has been afflicted with tri-facial neuralgia for years will not destroy life; while the insidious effect of the poison of typhoid fever creeps over the victim. A patient once remarked he could have died from typhoid fever never knowing anything about it. Fatal pneumonia is at first very painful, but soon verges into delirium and unconsciousness. Lock-jaw and hydrophobia produce terrible agony without destroying the consciousness of pain. It may be stated generally that it is exceedingly rare for a physician to observe a painful death. The minor ailments of every day life involve more suffering than the fatal illness produces.

Diseased conditions furnish scant opportunity for studying normal psychology; for the mind under such circumstances may show few traces of normality. I do not recall ever seeing but one case of death that gave any data that seemed to be worthy of study. This man from dysentery soon became delirious; and, after a period of coma, became violently delirious, which was not subdued by excessive dose of morphine and chloroform. He required to be held in bed, and his voice could have been heard for blocks. His theme seemed to

be a description of hell. He recounted at times, with a smile, the faces he met; and then he would attempt to flee horrible sights and experiences. His descriptions were graphic and were made seemingly in poetic stanzas. While apparently conscious, his attention could not be drawn, and cognizance to his surroundings was entirely lost. While not a religious man, his life seemed to have been exemplary.

The processes of death are very insidious, and after fatal symptoms arise, nature's anesthetic, the toxin of disease, makes dissolution painless. While the consciousness is anything like normal, man's conviction of death is very liable to error; he would get well as often as he would die. We might ask why death is certain. It can only be answered, that it belongs to the fixed order of life, and, as in every other function, must have an office to perform.

In the process of dissolution, first there is cessation of the moral sense, when reason begins to creak on its hinges, and distinctions cease to be made. This is not very apparent at first. The moral nature is the last to develop in man, and accordingly is first to disappear in dying. Few men afflicted with a fatal disease can be primarily assumed to be normal from a moral point of view; and spiritual responsibility, which can be properly judged only when all the functions are normal, is as evanescent in dissolution as it is in attaining the age of maturity.

Next, reason totters, and finally only fragmentary forms of mentality are evident. Of course, these processes ebb and flow, until unconsciousness supervenes; and after that stage the animal nature of man is apparent only, and death pursues the same phenomena as in animals. The death agonies would, in nearly every instance, be heart-rending to the attendants but for the use of soporific drugs; but such sufferings would never reach the cognizance of the victim. Morphine robs death of many of its horrors; for the vital forces give terrific battle to the toxin of disease even in certain death, while the conscious ego of man is soaring in unknown realms, oblivious to the struggles of the flesh.

The psychic course of a man's life runs very much like the physical part of his being. Every fleeting moment is irrevocable, and the present is but a hyphen between the present and the future. Man dies to the past, and his actual experiences can never be repeated. In the onward march of progress we die daily to the pleasures of yesterday. The pleasures of childhood cannot be repeated; the ardent youth can never experience the feelings of his first love; ambitions of young manhood perish with the using. The attainment of fame ceases to be alluring. To all of these man must die in a sense, if he pursues the physiological life. In his fifth lecture in "Eagle's Nest," Ruskin describes the feeling of satiety, that sooner or later must be experienced by all: "Every in-

creased possession loads us with a new weariness; every piece of new knowledge diminishes the faculty of admiration; and death is at last appointed to take us from the scene in which, if we were to stay longer, no gift could satisfy us and no miracle surprise."

Finally, the stage of death and decay arrives when every wise man will prefer to die, yet realizing a duty to live. Jeremy Taylor says: "He that hath done all his business and is begotten to a glorious hope by the seed of an immortal spirit can never die too soon or live too long."

As it is impossible to live with any degree of contentment in the past, man must press forward and still live in the hope of the future. Paul portrays the physiological life of man when he says: "But this one thing I do, forgetting those things which are behind, and reaching forth unto these things which are before, I press forward toward the mark for the prize." (Philippians 3: 13-14.) If the very old man could discover in the fountain of youth his physical prime, his psychic nature would not be changed and his satiety of life would confront him. There is that feeling that, sooner or later, comes to every one that they are "strangers and pilgrims on the earth." (Heb. 11: 13.) The oldest inhabitant of any community often seems more of a stranger than any one else.

The processes of death afflict every one according to natural laws; but philosophy and religion help the powers of endurance, which the confirmed

sinner cannot claim. But in all these death stalks "as a thief in the night." Preparation for death is a valuable asset to every old person, and when it is lacking, much confusion will be in evidence. Science, philosophy, and religion all teach that death is a friend. Metchnikoff says: "It has often been said that life is only a preparation for death." This skeptic scientist intimates that there must be something beyond, that is to be gained by dying. Cicero says: "From our youth upward, we must accustom ourselves to face our last moment. If not, there is an end to peace, since it is quite certain that we must die." Sir Thomas Browne says: "The world is not an inn for our entertainment, but a hospital wherein we may die."

The fear of death, though instinctive, is, to say the least, unphysiological; for any amount of dread does not undo the certainty. But if death is a friend to the hope for immortality, it becomes unnatural to be afraid to die. But to those, who have not this hope,—"to be carnally minded is death" to that hope,— there is nothing but rebellion to an insidious certainty. This rebellion at times stimulates a desire to live in the pleasures and ambitions of the past, but this is impossible of success. Yet these pleasures and ambitions, at the time of actual experience, were not properly appreciated. The man who fails of his opportunities will yearn for another trial. The man who elects suicide as a friend becomes a coward towards

life and defeats the law of conformity; for suicide is a moral wrong. Any one in mental health, who believes in a future reward for right doing, will not commit a wrong to reach that end. But the unphysiological man, who denies the existence of happiness, believing death to be a total annihilation, can overcome the fear of death by becoming a suicide. Hamlet balked when he was not sure that death was a total annihilation. There is a fatigue of life as there is a fatigue from a day's labor well spent, and the longing arises for rest and sleep. This world offers obstacles to man's better nature, from which he desires to become ultimately disentangled, and the restlessness of old age vainly pursues rest.[1]

There are three factors in the philosophy of death: the reasons for wishing to live, the instinctive fear of death, and the hope of future reward. If the reasons for living are *nil*, and if the fatigue of life has developed, death becomes the friend of hope of future rewards; and whatever the circum-

[1] The stage of life will arrive when the duty of living becomes more onerous than the prospect of dying, for death is a helpful friend; and there are many veteran Christians who esteem it a privilege to suffer the pain of a fatal illness to gain death. "Nevertheless not as I will, but as thou wilt." And it has been ordained that man shall not take his destiny in his own hands. The fact of suffering makes us value the friendship of death. Paul lived in obedience to that decree when he said, "For me to live is Christ and to die is gain." (Phil. 1:21.) Those who pray for a painless death seek to prevent the cogent reasons for coveting death.

stances may be, where hope for the future exists, a philosophical resignation will ensue. Of course the stage of inactivity arises, when the responsibilities lessen, or become inactive; and under these circumstances, man is judged by the past, as his record of his life's history is fixed. He can add to or take from this record but little, and peace and hope will be in evidence of past faithful performance.

Man must settle the question of death in health; for a spirit of resignation cannot be acquired in disease, when it was not had in health. Nothing but divine mercy can reach a mis-spent life, which is fixed and eternal. The important affairs of life cannot be properly dealt with by faculties crippled by disease; and a fear of impending dissolution cannot force a spirit of resignation, which was not claimed in health. For years of experience and self-education may have been required to settle the question. The ordeal of illness would seem to disqualify a philosophical resignation and increase rebellion.

Many, who believe themselves on their death-beds, make professions which they fail to live up to, when recovery takes place. Dying testimonies bear but little relation to the past lives, as the faculties are clouded by disease. The best testimony of a life is its record and the degree of repentance.

It would seem that many crave dying testimony from relatives, which are brought out by the in-

fluence of persuasion, and serve as no index to the future reward or past life.

The insidiousness of a fatal disease oftentimes serves a beneficent purpose. At first the patient thinks he is not ill but later realizes that he will be confined to his bed several weeks. After that he debates the probabilities of death, and he loses sight of returning to his business altogether. At about this stage, the benumbing influence of disease creeps upon him, and the man actually dies without ever experiencing those perturbing effects of contemplations he would have had in health, and it would seem that death would be more horrible to contemplate in health than even while dying.

Death divorces genius from personality that fame may crown the head of a great character. No great name is commonly esteemed great so long as it is connected with an ordinary personality, for there is a commonplace personality attached to every great genius and as long as we are familiar with the common weaknesses which every one must carry we fail to appreciate the true value of a genius. The United States Government will not use the engraving of any bust on currency of one so long as he is living. The greatest characters of history were not appreciated during their lifetime as we now esteem them. In fact the greatest characters of earth have been despised by their contemporaries because of that human weakness that ignores greatness in the presence of ordinary frailties, and for the same reason had we seen the

humble personality of the carpenter's Son we probably would have failed to comprehend the kingship in Christ which has been reverberating through these twenty centuries. We should deplore the fact of human weakness in esteeming "A prophet is not without honor, save in his own country and in his own house."

Every one who has been the contemporary of a pupil whose head has been subsequently crowned by fame wonders why it should be so as the boy seemed like other boys, and there arises a tendency to resent the advent of fame as being undeserved. It would seem that greatness is first persecuted and then after severing the ordinary personality, genius rises into preëminence and we build monuments of marble to their memories after a period of years, and it would seem that a great life must die to indelibly impress the force of genius. "For where a testament is, there must also of necessity be the death of the testator. For a testament is of force after men are dead; otherwise it is of no strength at all while the testator liveth." Hebrews 9: 16-17.

CHAPTER XVII

IMMORTALITY

The numerous discoveries that have wrought what we now call the scientific age, have only revealed the broad horizon of the unknown, and we are beginning to apprehend only an infinitesimal part of the knowable. The same observation has been made in the world of psychology. It is evident that only a very small part of ourselves ever rises to the plane of consciousness, and the sub-conscious self remains a great unknown world; yet the influence of the sub-conscious states is far-reaching, affecting life in its varied phenomena. Perhaps few of the psychological phenomena ever rise to the plane of science, such as intuition, emotions, memory, etc., and the greater part of man's spiritual experience that occupies a major position of importance in life's activities constitutes a realm, a knowledge of which can only be apprehended by personal experience. There is no analogue to the spirit of altruism in the world of nature and the same is true of faith and hope for immortality. In fact, a greater part of religious experience belongs to this realm, and a scientific education plays but little part in such attainments,

for the educated and uneducated meet on the same plane of experience. Yet religious experience ensues according to certain fundamental spiritual laws which may admit of scientific classification.

Psychical Research is a very young science, scarcely thirty years old, and is just beginning to collect genuine phenomena that formerly were relegated to superstition. It has been shown by men of science that our sublimal selves can unquestionably communicate with disembodied spirits after death. Revelation has always been more fruitful in spiritual experience than can be demonstrated scientifically, and the possibilities are unlimited. With dim vision positive evidences of communications with disembodied spirits have been recorded, and it were futile for us in the search of more knowledge to deny the existence of such because of the incompleteness of our knowledge, hampered by the flesh as we are. Glimpses of an unknown world loom up in a positive way, and it is presumptuous to demand of such a realm of infinity to furnish us more knowledge, hampered by our sphere of finitude bound by the flesh. Analogies are not lacking to show such inconsistencies.

The late W. T. Stead had a spiritualistic meeting in which the prediction of the murder of King Alexander and Queen Draga several months beforehand was signed by thirty witnesses and presented to the Servian minister in London. The murder took place as was predicted. This is one of the numerous authentic instances of a phe-

nomenon — miracle — that no one presumes to be able to explain and cannot be duplicated at will.

Mysticism unquestionably dominates many of the higher motives. History is replete with such instances. Because mysticism does not conform to the rules of science, many refer to this class of phenomena as superstitions. There are many truths, that we know as such, that cannot be proved. Some would ascribe the great powers of the character of St. Paul to mysticism. When without money, health, or position, he laid such colossal foundations in the doctrines of Christianity. He says: "Not I, but Christ in me." It is almost incredible that the child of a peasant, Joan of Arc, could have led the armies of France by some mystic influence, but it was a fact. She was dominated by this influence, but she knew not how or why. Human conduct receives impulses from the unknown realm, that have much to do with the determination of character; yet these impulses require to be trained, and may be good or bad.

Intuitive opinions radiate from the realm of the sub-conscious, and oftentimes are more reliable than those that can be reasoned out. Prejudice, or preformed opinions, belong to the same class and serves a definite, practical purpose. In the social world we speak of congenial spirits, without attempting to give any reasons for such. In fact we learn to value certain friendships because we cannot explain the attractions.

We feel much that we cannot know or prove, but which, at the same time, is real. Dislikes pursue the same course. There are many cases of affinities in history, that defied the social and even moral laws, and are a striking illustration of the influences that radiate from the sub-conscious realm.

The results from the study of physiognomy prove that more of our conclusions are intuitive. An observation of the human face reveals a great deal more than can be explained by color, form, and symmetry.

After all, only a small part of our lives is ruled altogether by reason; but the impulses from the sub-conscious realm occupy an important place and can be trained somewhat, and may be good as well as bad. Dreams oftentimes affect our lives during the following day. A suggestion may arise that seems somewhat familiar, and is, for that reason, more easily followed up. Finally the whole matter may occasionally be traced back to a dream; a smattering of which rising to the level of consciousness, we sometimes recognize a familiarity between the conscious and sub-conscious. At the moment of awakening from a dream, there may be an eagerness to catch a glimpse of the sub-conscious, and sometimes in the half way state, you feel that you have it; but when completely awake, it all flits away and one feels that a rich find has been missed by not being able to bridge over between the conscious and sub-conscious.

Herbert Spencer says there is probably a "mode of being as such transcending intelligence and will, as these transcend mere mechanical motions." There are as many mysteries in physical science and the realm of psychology as there are in the moral universe. Personality cannot be measured by time and position, and is one of those psychic identities that is as plain to consciousness as a tree or an animal would be. It puzzles our science to explain the simplest psychological phenomena. There is in reality a self disembodied. Plato and Christ are just as much personal identities now as they were when their bodies were inhabited by souls.

Man's identity lies beyond his physical structure; for much of his anatomy may be sacrificed without impairing his identity. He would be the same if all of his limbs were amputated. The frontal convolutions of the brain are believed to be the seat of intellectual processes. But in head injuries much of brain substance may escape, when the skull is trephined; yet consciousness remains unaffected. I recall the case of a man who received a severe blow over the front of his head. He walked to the operating room, and all of his mental faculties seemed to be normal. After trephining, it was found that several portions of his skull were driven an inch or more into the brain tissue, and every act of coughing during the operation forced out in all about an ounce of brain substance. His recovery was uneventful. Yet

there is a limit to the loss of physical material before man will suffer mental disorder.

We have observed some phenomena which are accepted, but cannot be comprehended by science. It would be purblind to say that we do not accept any phenomenon as true that cannot be explained by science. Yet science, especially in psychology, has recognized that which was formerly relegated to superstition.

Spiritualistic phenomena may be cited as an instance. Some of the most prominent psychologists, such as William James and Sir Oliver Lodge have accepted the truth of spiritualism. The spirit world is, as yet, an unexplored world of truth.

Perhaps one of the greatest factors in spiritual development is faith, which is intimately associated with the sub-conscious realm. The reciprocal relations between the conscious and sub-conscious states have grown to be recognized more than ever by scientific men; and this goes a great way towards explaining religious phenomena, which were formerly supposed relics of superstition. The doctrine of a personal God can only explain facts of religious experience.

The greatest asset in commercial life is faith, without which panics run riot, even when material resources and money are in no way lacking. Business firms extend credit to individuals according to the confidence gained, and not because of the material wealth necessarily. A man's demeanor

in the commercial world determines his credit more than his wealth. Every large firm has what is called a credit man, whose intuitive faculties are acute and cultivated. His most reliable decisions are oftentimes made without reasoning, and his business faith becomes the valued guide. Yet faith is not unreasonable or unintelligible, but requires cultivation in intelligent channels. Blind faith tries to believe the absurd and unreasonable; while intelligent faith comprehends the reasonable and practicable. The former disregards all relations between the conscious and sub-conscious states; while the latter harmonizes these reciprocal influences. Faith is defined by Paul as, "The substance of things hoped for, the evidence of things not seen"; and this definition can be applied to all forms of faith. Dr. McCosh says: "Faith is the consent of the will to the assent of the understanding." So faith may be the result of reasoning, but reason cannot proceed from the activity of faith. Credulity does not reason. Faith is based on evidence, and evidence on reason. The command to believe rules out prejudice and bias, and bids a fair examination. So the exercise of faith is a voluntary process, being directed by intelligence. The credulous idiot weighs no evidence, and is governed by no reason, while the irrational skeptic rules out all evidence. Reason cannot originate truth, but may discern the evidence. Reason cannot prove that fire burns without experience. Reason could not have proved the transil-

lumination of opaque substances by the X-ray; but experience proves it. The older scientists would have said that this contradicts reason, which was based on experience. So reason cannot prove without experience.

Previous to the discovery of radium, it was not believed that a small bit of substance could evolve energy almost indefinitely; but experience has proved that it can. An ounce of radium would be worth three million dollars, and it has been calculated that radium will continue to throw off light and heat for a billion years without losing a millionth part. So reason is helpless without experience. The exact relations between soul and body cannot be comprehended, but experience shows that intimate relations do exist. Intelligent faith sees the evidence. A seed may be active under certain conditions, but such activity cannot be explained.

Henry Rogers says: "Reason and faith are brother and sister. Reason, the brother, is deaf; and faith, his sister, is blind. Reason walks in the light by sight; but when darkness comes, faith becomes the guide through hearing. Faith ever listens to the voice of God and walks without sight." Rockefeller had faith in oil, Astor in real estate, Morgan in stocks and bonds, Carnegie in steel, and Harriman in railroads, and all met their rewards by walking by faith. Those who walked by sight were mediocre. Bell believed the voice could be transmitted by electricity, and Edison

believed that electricity could be used for illumination. Moses believed a nation of slaves could be made the greatest people in the world. Faith always precedes great achievements, and the Christian will reap rewards from his faith. "Give a reason for the hope that is in you." These psychological phenomena have been discussed in order to show that they are no less reasonable than the innate hope for immortality. This hope is implanted for a purpose to better human lives, and it would be an unwise Ruler that would implant such a desire and never fulfill the promise. There are as many or more miracles in the physical universe as exist in the spiritual realm. Many of these have been noted. That mysteriously sad effect of misfortunes seems inexplicable — a miracle — and no good effect could be believed to follow; but it is plain to the wise veteran Christian, who has discerned the laws of the spiritual life. Are not the pains of certain disappointment but results of ignorance of the divine law? And is not the fact of pain the only portal of entry to the spiritual knowledge in those who cannot learn except by experience? The supernatural is nothing more than the unintelligible to our finite minds, and the unknown of today may be the known of tomorrow through experience.

Immortality may be defined as the summum bonum of life; and a hope for such is found in some form or other in every nationality. The Greenlanders bury implements with their dead, to

be used in another life. The natives of the Fiji Islands believe that they will be born again. The North American Indians believed there was no sorrow after death, and for that reason did not fear death. The Kaffirs pray to their dead relatives to prevent them from tormenting their descendants. The Polynesians offer their first fruits to their dead chiefs, whom they believe to be deities. The Buddhists hope for Nirvana after death ("The Nature of Man," Metchnikoff, page 151). The Chinese worship the disembodied spirits of their ancestors. A belief in the presence of disembodied spirits of their ancestors as well as those of posterity perhaps explained the victory of the Japanese over the Russians. Funeral ceremonies are but a feeble effort to immortalize the spirt of the deceased. Marble statues and tombstones are made of the most durable materials for the same purpose. So the hope for immortality is a fact no less mysterious than other psychological phenomena, and furnishes the highest incentive towards the betterment of human conduct. All the evidences that have grown out of human experiences are in favor of immortality while those against it are lacking. Science cannot prove the impossibility of a future existence, if experience does furnish data for belief in immortality. In organic life, mortality cannot be proved, for the assemblage and dissolution of elements that make up animal life never lose their identities.

Nothingness has come to be recognized by

science as a misnomer and an utter impossibility. From the smallest visible piece of matter we can reason to the molecule, from molecules to atoms, and then to the electrons, and now it is attempted to make a bridge from the electrons to the universal ether. It was formerly believed that the ether of the universe was nothing, but now it has been demonstrated that this imponderable ether exhibits vibrations in producing light, X-Rays, wireless electricity, radio-activity, etc., and is by no means nothing. Without the presence of ether a universe would be impossible. Sir Oliver Lodge advocates the doctrine of continuity in everything, and refers to the ether of space as the engine of continuity. What is true of the material universe that is capable of being demonstrated is no less true in the spiritual world which can be demonstrated by those whose psychic sensibilities have been educated to perceive the radiations from the great store house of Truth. Annihilation is just as impossible in the one as in the other.

Science now demonstrates veins of immortality that run through the world of cellular life. The unicellular organisms never exhibit any signs of old age when surrounded by a medium favorable to their growth, and instead of dying at a certain period they simply sub-divide into two portions and so on to infinity. Old age in cellular life means a deterioration of nutrient media which when replenished revivifies the activity of the cells.

Science now calls the "last enemy" a self-

poisoning, a phenomenon incident to all forms of life. Detached tissues and organs of the body show the same tendencies. For instance, all the abdominal organs, heart and lungs have been severed from the cat and made to perform their normal functions for a period of nearly twenty-four hours, and should the production of environments be made more nearly perfect this elemental life could be preserved a greater length of time. It has been also demonstrated that the phenomenon of hibernation can be imitated in preserving the life of tissues and the various organs of the body may be kept indefinitely in cold storage in a state of suspended animation. When, however, food in proper fluids and heat are applied, functional activity resumes. Cold blooded animals, such as snakes, toads, wood-frogs, turtles, etc., sleep through the entire winter and are apparently lifeless, but when spring arrives hunger wakes them, and after a hearty meal they resume normal activity. So from the standpoint of science death is nothing more than cellular suicide, and when the waste products of life fail to be eliminated self-poisoning ensues. Theoretically, so long as waste materials can be promptly eliminated and food elements re-applied, animal life may be said to be immortal and mortality cannot be proved. Suppose, for instance, that a man should happen to have a fatal accident and his body could be kept in a state of suspended animation, and were it possible that the injury could be repaired during this

period, the conscious ego would return to take up its abode.

That indefinable entity we call conscious personality existed somewhere and under certain circumstances comes back to inhabit its host and science would tend to show that the story of the death of Lazarus and a return to life after four days is not impossible, and the statement in reference to the death and a return to life of Jairus' daughter is not all incompatible with the present day scientific teachings. "And her spirit came again and she arose straightway; and he commanded to give her meat." (Luke 8:55.) If scientific progress (which is as yet in its infancy) continues as has been noted, the resurrection of the body will be a demonstrated fact. What we believed a few years ago but could not demonstrate now admits of scientific proof, and man's beliefs have always extended beyond his knowledge, and the reasonableness of a belief in immortality has already been shown by science. It therefore becomes unreasonable to believe in the unreasonableness of immortality.

Our sphere of knowledge would be very contracted were it limited to the sources of reason. Bergson says: "It would be difficult to cite a biological discovery due to pure reasoning. And most often when experience has finally shown us how life goes to work to obtain a certain result, we find its way of working is just that of which we should never have thought." The richer truths

of human experience cannot be demonstrated mathematically; yet they are faithfully believed. A woman's faithful devotion to her family does not admit of positive proof and would be argued perhaps pro and con by different observers, and the woman herself might not be conscious of it to the fullest extent. However much one believes that some misfortune has wrought good, this cannot be subjected to the processes of reason. However much we believe that honesty is the best policy, we cannot prove it. The fruits of a clear conscience do not come within the realm of scientific reason. However much we believe that God has been a ruling factor in our lives, we cannot prove it to one who is not like-minded. As a veteran Christian once said, she not only believed in immortality but felt it. Such an experience cannot be proved.

For some unaccountable psychological reason, the most valuable human experiences are beyond the pale of pure reason, and because of that fact are valuable. The infinite forces of Christianity have been driven because they have been doubted by many.

Bartholemy Saint-Hilaire says: "Philosophical truths have value only as they are disputable; they do not affect your reason like the axioms of geometry; their very power to save or ruin a man lies in the fact that they may always be freely accepted or freely rejected."

The resurrection of Christ is a historical fact,

and is positive evidence of immortality, while there are no evidences recorded to prove that personality cannot exist after death. Such proofs require to be studied from the standpoint of human experience, the evidences of which having been accepted, makes immortality reasonable. The fact of a certain faith in immortality in individual experience is perhaps one of the most constant and settled phenomena in religious experience. There is no greater degree of certainty in the world of psychology than exists with such individuals. The positive belief of the Christian by far outweighs in reality the positive disbelief of the skeptic. Suffering is perhaps the most active means towards the attainment of immortality, and the facts of human experience bear out this statement. The highest example set in the records of history is the life of Christ. Temporal sufferings by far outweighed the pleasures for a season, and He taught that we must hate this life in order to attain immortality. The philosophy of comfort and pleasure has no place in the divine nature of man; yet certain individuals try to disprove this by their lives. True philosophy must conform to the inner laws of human nature, which are frequently misread. "He that loveth his life shall lose it; and he that hateth his life in this world shall keep it unto life eternal."

INDEX

JUN 20 1918

INDEX

Air, bad, advantages of, 15.
Altruism, 113.
Anesthetics, 91.
Anarchy in the church, 142.
Angels of peace, 145.
Anxiety, 72.
Appreciation, sense of, 153.
Arterio-sclerosis, 182.
Asceticism, 125.
Aspiration, 155.
Atmosphere, where sterile, 14.
Auto-intoxication, 175.

Battle of vital elements, 181.
Blood, amount of, 42.
Browning, quoted, 175.

Charity, discussed, 114.
Chastity, 147.
Chemotaxis, 1.
Climate, prodding effects of, 10.
Competition, 61.
Conscience, defined, 69; pain of violation of, 101; sphere of, 95.
Crying of infants necessary, 25.

Death, a friend, 187; coveted by the wise, 187; fear of, 80, 187; phenomena of, 182; philosophy of, 188; preparation for, 173, 187.
Defeat, wholesomeness of, 66.
Degeneration, advantages of, 169.
Delirium, 31.
Destruction, philosophy of, 180.
Digestion, germs necessary to, 17.
Discontent, divine, 155.
Disease, anesthetic effect of, 184; hardening effects of, 37; limits of

necessity for, 33; phenomena of, 49; vulnerability to, 32.
Drugs, cumulative effects of, 29.
Dust, necessity for, 15.

Education, defined, 55.
Eel, life cycle of, 5.
Effort, painful, 54.
Endurance, manner of, 160.
Eskimo, vulnerability of, 14.
Evolution, 9.
Experience, a school, 101.

Failure, 68.
Faith, 197.
Fatigue toxins, 28.
Fear, functions of, 77.
"Flesh," defined, 125.
Food, harm of sterile, 17.
Forgetting, art of, 121.
Freedom, defined, 128.

Genius, afflicted by personality, 190.
Germs, friendly, 17.
Giving, 126.
God, a necessity, 105.
Golden Rule, the, in business, 62.
Good and evil, contending, 135.
Grief, 159.
Guilt, 165.

Hell, a fact, 80, 165.
Humility, powers of, 151.

Identity of man, 196.
Immortality, 192.
Immunity, acquired, 33.
Individual, life battle in, 134.
Infancy, 25.
Infant digestion prodded, 20.

Law, meaning of, 108; parental, 109.
Leucocytes, functions of, 41.
Liberty defined, 131.
Life, species of, 4; the school of, 54.
Living backwards, 172.
Lungs, anatomy of, 13.

Man, climatic adaptability of, 9.
Martyrs to science, 104.
Misfortune, effects of, 82.
Money as a means of charity, 114.

Moral nature, identity of, 94.
Mortality, not proved, 201.
Mysticism, 194.

Narrow path, the, 167.

Old age, 169; stock taking in, 176; tragedy of, 176.
Overwork, 30.

Pain, absence of, 45, 99; in childhood, 108; in animal life, 7; in religion, 105; mental, 48; philosophy of, 105.
Paradoxes defined, 99.
Parasites, life cycle of, 5; of joy, 103.
Parturition, 22.
Past, the, a form of death, 185.
Peace, how obtained, 135.
Phagocytosis, 41; a war of the survival of the fittest, 44.
Piety, 178.
Pleasure, the fear of, 79.
Praise, 153.
Prayer, effects, 106.
Prejudice, effects of, 85, 136.
Pride, 151.
Prodding by extremes of temperature, 16.
Psychical Research, 193.
Psychology in disease, 183.

Reason, limits of, 204.
Rebellion, 160.
Religion and morality compared, 95.
Religious experiences, 96, 193.
Remorse, 164.
Repentance, 100.
Respiration, effects of temperature on, 13.
Responsibility, limits of, 184.
"Rod," the, 108.
Ruskin quoted, 186.

Sacrifice of nature, 4.
Sanitation, 34.
Savages, mortality of, 36.
Seeds, destruction of, 3.
Selfishness, 113.
Self-denial, 129.
Self-lessness, 125.
Self-pleasures, 116.
Self-sacrifice, 123.
Service, 140.
Serum treatment, 35.
Sexuality, 147.

Social sin, 148.
Sorrow, 161.
Spiders as prey hunters, 7.
Spirituality, 177.
Striving, effects of, 119.
Subconsciousness, 192.
Success defined, 59.
Suffering, when wholesome, 65; vicarious, 117; capacity for 112.
Suicide, cowardice of, 188.

Temptation, 144.
Torment, 165.
Tragedy in molecular life, 2.
Tubercular, the progeny, 37.
Tuberculosis, susceptibility to, 14.

Unfitness, a preparation for death, 4.
Unselfishness, inborn, 6.

Vaccination explained, 38.
Vitality, spirit of resistance of, 43.

Warfare in animal life, 7.
Warring for peace, 133.
Wasp, the mud, 4.
Worry, when wise, 74.
Wrongdoing, fear of, 78.

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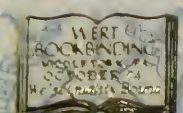
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